PUBLIC SERVICE COMMISSION OF WISCONSIN
Memorandum

TO: The Commission

FROM: Robert Norcross, Administrator
Thomas Ferris, Docket Coordinator
Gas and Energy Division

RE: Investigation on the Commission's Own Motion Regarding Innovative Utility Ratemaking Approaches that Promote Conservation and Efficiency Programs by Removing Disincentives that May Exist Under Current Ratemaking Policies — 5-UI-114

BRIEFING MEMORANDUM

Statement of Proceeding

By notice dated April 3, 2008, the Commission, on its own motion, opened an investigation to consider innovative utility ratemaking approaches that promote conservation and efficiency programs. The purpose of the investigation is to examine existing ratemaking policies that may discourage utilities from implementing their own programs or supporting statewide programs, and provide in their place incentives for utilities to aggressively pursue cost-effective conservation and efficiency opportunities.

The Governor's Task Force on Global Warming (Governor's Task Force) issued an interim report on February 19, 2008, recommending that the Commission establish a public proceeding to analyze the nature and extent of potential disincentives to utility support for energy conservation and energy efficiency initiatives. The interim report also recommended that the Commission identify and, if appropriate, take the steps necessary to address such disincentives. According to the interim report, this inquiry should include both the potential need to remove

specific disincentives and also the potential need for and design of effective mechanisms that would provide utilities an incentive to support aggressive energy efficient initiatives. Such new approaches should explore any rate or other mitigation strategies to minimize customer impacts (including potentially excluding specific customer classes, such as large price-sensitive customers). These new approaches should also consider changes in programs and rate provisions to protect low-usage and low-income customers.

Any ratemaking changes should be designed to provide long-term customer benefits on a least cost, cost-effective basis. Given the expected rate impacts from such policy changes, this investigation considers whether it may be more appropriate for the implementation of a specific policy change to occur in a proceeding that provides the opportunity to be heard and the opportunity for effective public participation, such as a utility rate case proceeding.

To further its review of incentives and disincentives related to conservation and energy efficiency programs, the Commission requested comments on a list of questions as shown in Appendix A. Appendix B is a summary of the comments received. Comments were received from Wisconsin Power and Light Company (WP&L), Wisconsin Electric Power Company (WEPCO), Wisconsin Public Service Corporation (WPSC), Northern States Power Company (NSPW), Madison Gas and Electric Company (MGE), Wisconsin Public Power Inc. (WPPI), the Joint Public Intervenors (JPI), the Industrial Customer Group (ICG), and the Energy Center of Wisconsin (ECW). The JPI consists of the Citizens' Utility Board, Clean Wisconsin, and RENEW Wisconsin. The ICG consists of the Wisconsin Industrial Energy Group, the Wisconsin Paper Council, and the Midwest Food Processors Association. The Municipal Electric Utilities of Wisconsin (MEUW) filed a letter supporting the comments and recommendations of WPPI. In addition, MEUW states, "While not commenting on its application to private utilities,

decoupling has no place in public power ratemaking since public power utilities are not in the business to make a profit, they are in the business to provide a service to customers. Any 'profit' to speak of is ultimately returned to their customers owners. Our shareholders are our customers." (MEUW letter dated July 14, 2008)

Introduction

High fuel prices, escalating construction costs, increased uncertainty regarding cost recovery for new generation plants, concerns with system reliability, public opposition to new siting, and looming environmental costs (carbon emission costs) have all led to the need for more energy efficiency programs.

Regarding the potential increases in environmental costs, the electric and natural gas industries are looking at increasingly stringent regulations to limit greenhouse gas emissions. According to the literature on the subject, energy efficiency and other demand resources currently offer one of the best options for complying with such regulations and, thus, will play a key role in addressing climate change issues.

It has often been suggested that there is a disincentive for natural gas and electric utilities to aggressively pursue cost-effective natural gas and electric energy efficiency programs because doing so results in an adverse impact to shareholders due to lost revenues. Eliminating this disincentive could make the utility indifferent as to whether it implements such energy efficiency programs or constructs new utility facilities. Decoupling, one such tool to accomplish this, is intended to make the utility whole for lost revenues resulting from these programs. Another tool, and one that could be used in tandem with decoupling, is providing some type of performance incentive for energy efficiency achievement. The objective of this docket is to explore ways to maximize investment in cost-effective energy efficiency at a reasonable cost to ratepayers

without harming utility shareholders. Traditional regulation creates an environment in which revenue levels are a function of sales. Consequently, a utility's profitability depends on maintaining or, more often, increasing sales, even though such sales may be, from a broader societal perspective, economically inefficient or environmentally harmful.[1] A utility typically has a very strong incentive to increase sales and, conversely, an equally strong incentive to protect against decreases in sales. This is referred to as the "throughput incentive." It inhibits a company from supporting investment in and use of energy efficiency least-cost resources for meeting energy needs, and it encourages the company to promote incremental sales, even when they are wasteful.

Spending on energy efficiency and demand response programs may impact a utility's bottom line in three ways:

1. The most immediate impact is that of the direct costs associated with program administration, implementation, and incentives to program participants. Failure to recover these costs produces a direct dollar-for-dollar reduction in utility earnings, all else being equal, and sends a discouraging message regarding further investment.

2. The second impact, sometimes called the lost margin recovery issue, is the effect on utility financial margins caused by the energy efficiency-produced drop in sales (lost revenues). Utilities incur both fixed and variable costs. Fixed costs do not vary as a function of sales in the short-run. However, most utility rate designs attempt to recover a portion of these fixed costs through volumetric prices. If actual sales are lower than the level estimated when prices are set, the utility is at some risk for not recovering all of its fixed costs. In addition, a

[1] Shirley, Wayne, Lazar, Jim, and Weston, Frederick, The Regulatory Assistance Project (June 30, 2008), *Revenue Decoupling: Standards and Criteria, A Report to the Minnesota Public Utilities Commission*.

utility's ability to over-recover its fixed costs by boosting its sales gives the utility a perverse incentive not to achieve energy efficiency goals.

3. The third impact concerns incentives for utilities to undertake such investment. Under traditional regulation, investor-owned utilities earn returns on capital invested in generation, transmission, and distribution. Unless given the opportunity to profit from the energy efficiency investment that is intended to substitute for this capital investment, there is a clear financial incentive to prefer investment in supply-side assets, since these investments contribute to enhanced shareholder value.

Wisconsin addresses the first problem, the direct cost recovery disincentive, by use of conservation escrow accounting. Incentives for utilities to undertake energy efficiency investments, the third problem, can be provided in a number of ways as discussed later in this memorandum. The impact of energy efficiency programs on utility margins, the second problem, is the disincentive that generates the most debate. Mechanisms for addressing the utility margin issue are also discussed later in this memorandum.

Discussion of Issues

The following are the issues subject to the Commission's decision in this proceeding along with a discussion and alternatives for each issue. To better coordinate this briefing memorandum with the survey questions sent out in this proceeding, each question is listed.

1. Do the current rate structures of the electric and gas utilities in Wisconsin contain net lost revenue and profit effect that is significant enough to discourage these utilities from developing and spending additional[2] money on energy efficiency programs?

As discussed in the Introduction to this memorandum, it has often been suggested that there is a disincentive for natural gas and electric utilities to aggressively pursue cost-effective natural gas and electric energy efficiency programs. The answer to Question #1 may depend on the answer to Question #5 regarding whether a decoupling mechanism should consider only the effects of additional energy efficiency spending or also the effects of other factors such as the economy and weather. The impact of changes in a utility's sales only brought about by energy-efficiency programs may be less than the impact of all changes in a utility's sales no matter what caused the change.

In determining if there are significant disincentives to discourage the utilities from developing and spending additional money on energy efficiency programs, the Commission may want to consider the following list. Each of these items, individually or combined, may either eliminate disincentives or sufficiently minimize the impact of disincentives so that a decoupling mechanism is not needed. The discussion under Question #9 regarding the impact of the current rate case process and current Wisconsin statutes may also be helpful in addressing this question.

1. Escrow accounting, deferrals, regular rate cases, and Commission-authorized returns may already provide utilities a sufficient level of risk protection to eliminate or minimize any disincentives. If a utility implements new energy efficiency programs between rate cases and the dollar amount of lost revenues is expected to be large before its next rate case, a deferral could be used.

[2] The word "additional" is meant to refer to energy efficiency expenditures that are not otherwise required by law or by Commission order.

2. Base rates already are based on projected revenues that incorporate assumptions regarding energy efficiency and conservation. These assumptions are updated at least every two years in the biennial ratemaking process.

3. Both the Wisconsin statutes and the Commission's own authority may already provide a sufficient regulatory framework to support and encourage energy efficiency and conservation.

4. The statewide Focus on Energy program may be in a better position to promote energy efficiency and conservation programs than utilities.

5. Any harm from lower sales due to energy efficiency programs in excess of the levels reflected in rates for the biennial period may be mitigated or eliminated by increased sales into the MISO market.

In response to the survey in this docket, WP&L, WEPCO, WPSC, WPPI, and the JPI maintain that traditional rate regulation of the electric and gas utilities in Wisconsin does contain a net lost revenue and profit effect that is significant enough to discourage utilities from fostering additional energy efficiency savings. WP&L states that increased energy efficiency spending and outcomes without a corresponding mechanism to recoup lost revenue requirements could discourage incremental efficiency programming. Current rate structures may put customer and shareholder interests at odds. (WP&L Comments, page 1) In its comments WEPCO maintains that providing positive incentives to increase investment in energy efficiency is more effective than discouraging increasing sales. Providing incentives builds on the assumption that a utility will act in its own financial interest. For natural gas utilities, rate design that recovers all fixed distribution costs through fixed rates mitigates negative revenue impacts of energy efficiency programs that reduce sales. (WEPCO Comments, pages 2-3) WPPI, WPSC, and JPI make

similar comments. (WPSC Comments, page 1; JPI Comments, pages 2-8; WPPI Comments, pages 1-2)

In response to the survey, NSPW and MGE both maintain that most of the disincentives are eliminated by the regulatory model in Wisconsin, but that additional changes to the regulatory model will further mitigate any remaining disincentives. NSPW states, "The current rate structure uses escrow accounting for conservation expenditures coupled with biennial rate cases. Energy efficiency efforts reduce sales between rate cases causing a decrease in the contributions to fixed margins that would have been collected through these lost sales. Given Wisconsin has biennial rate cases these losses are contained and therefore the current structure does not provide a significant disincentive to the current level of energy efficiency efforts. However, the current rate structure depends on energy sales for recovery of both fixed and variable costs, therefore increases in the amount of energy efficiency do have an effect on sales and lost margin recovery." (NSPW comments, page 1) In its comments MGE states, "The regulatory model currently used in Wisconsin eliminates much of the potential financial effects and disincentives. Additional improvements in the Wisconsin ratemaking process to address the issue would further mitigate any potential financial harm and reduce the perceived disincentive." (MGE Comments, page 1)

ICG argues that it is irrelevant whether or not any disincentives may exist, since the statewide energy efficiency program is mandated and the returns authorized in Wisconsin are higher than the industry average. ICG also believes that if the Commission wants to encourage additional energy efficiency, it can do so within the current statutory and regulatory framework. (ICG Comments, pages 3-8, 21-22)

ECW states, "… if a utility has a successful energy efficiency program, its sales growth rate will slow. When the Commission sets that utility's rates, it will likely consider that fact. To earn its authorized return on equity, this utility need only continue to grow at its slow, energy-efficiency-induced rate." In addition, ECW states, "Therefore, if the Commission makes a good faith effort to incorporate the impact of the energy efficiency programs when establishing test year sales forecasts, then the level of actual lost revenues is likely to be small, and can be attributed to forecast error." (ECW Comments, page 3) Finally, ECW states, "The lost revenues created by a specific program exist only between rate cases. Once the utility files for rate relief, actual lost revenues are subsumed into the utility's historical load, which in turn drives its load forecast for the next test year." (ECW Comments, page 6)

The ECW maintains that lost assets (the inability to earn a return on energy efficiency investments) may be more significant than lost revenues. "While lost revenues may be of concern, a potentially bigger financial issue is the impact of energy efficiency programs on the utility's rate base. The problem in that regard is one of lost assets, and the associated lost returns on those foregone investments. Lost revenue adjustment mechanisms, do not, and cannot, address this financial effect." (ECW Comments, page 1) In its comments ECW maintains "Over the long-run, energy efficiency programs slow the rate of growth in *RB* [rate base]. We refer to this as the lost assets problem. The rate base is the ultimate source of utility cash flow generation; under normal conditions, limiting its size will cause concern among utility executives. This is true even if the utility is made whole for any rate of return erosion that results from energy efficiency programs." (ECW Comments, page 3)

The Commission can draw any of the following conclusions regarding the existence of disincentives involving energy efficiency programs:

Alternative One: Traditional rate regulation of the electric and natural gas utilities in Wisconsin contains a net lost revenue and profit effect that is significant enough to discourage these utilities from fostering additional savings from energy efficiency programs.

Alternative Two: Traditional rate regulation of the electric and natural gas utilities in Wisconsin do not contain net lost revenue and profit effect that is significant enough to discourage these utilities from fostering additional savings from energy efficiency programs.

Alternative Three: Traditional rate regulation of the electric and natural gas utilities in Wisconsin may contain net lost revenue and profit effect that is significant enough to discourage these utilities from fostering additional savings from energy efficiency programs. This decision must be made on a utility-by-utility basis.

2. Is your utility likely to propose energy efficiency spending above current levels if any disincentive to do so is removed?

3. If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency is it best for (a) the utility to develop and implement the programs; (b) should that be done by Focus on Energy; (c) should it be done through a combination of the utility and Focus on Energy; or (d) should it be done by some other entity?

4. Do utilities currently have the resources to develop and implement additional energy efficiency programs?

Questions #2 and #4 do not require a Commission decision in this proceeding. The answer to Question #3, which asks which entity should provide the additional new programs is mixed (Question #3). WP&L suggests that each utility should decide what is appropriate in the individual circumstances. (WP&L Comments, page 2) MGE appears to agree and states that which entity develops and implements the program will depend on the program's specifics. According to MGE, the Commission should be open to a combination of Focus on Energy and utility programs. (MGE Comments, pages 1-2)

WEPCO states that there is no one answer. If the utility provides its own programs, to avoid redundancy, company programs must focus on market areas not targeted by the statewide programs. (WEPCO Comments, page 3)

NSPW's position is that there is no easy answer. The company is comfortable with Focus on Energy, but if expanded, there must be timely cost recovery, and a review of lost margins in the current rate structure. (NSPW Comments, pages 1-2)

WPSC opposes utility-provided programs since they introduce duplication, conflict, and confusion with existing Focus on Energy programs. WPSC argues that using the Focus on Energy program is the best approach to providing uniform and consistent energy efficiency programs across the state. (WPSC Comments, page 2)

Regarding municipal utilities, WPPI does not see any benefit in creating new organizations to deliver programs. (WPPI Comments, page 3)

ICG's position is that a utility's core business is to sell electricity and natural gas. Energy efficiency should be promoted through a non-utility entity whose core business is energy efficiency, such as Focus on Energy. This will be more cost-effective and reduce confusion in the market. (ICG Comments, page 23)

According to JPI, the issue of how to ensure the best energy efficiency programs should not be addressed in this docket. This issue involves a very different set of considerations. (JPI Comments, page 9)

Finally, ECW states, "Given the need to meet the aggressive energy efficiency targets, we suggest that the Commission continue to be open to the possibility of including multiple players in this regard. It seems as though the proper approach would be to fill gaps in energy efficiency delivery, while avoiding unnecessary duplication of effort." (ECW Comments, page 9)

Commission alternatives regarding which entity should develop and implement new energy efficiency programs are:

Alternative One: If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency, Focus on Energy should develop and implement the programs.

Alternative Two: If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency, a combination of the utility and Focus on Energy programs is appropriate.

Alternative Three: If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency, it should be done by some other entity.

Alternative Four: The issue of whether and under what circumstances a utility should be allowed to develop and implement programs should be addressed in docket 05-UI-115, the docket regarding increasing the level of energy efficiency savings.

5. Should a decoupling mechanism consider only the effects of additional energy efficiency spending or should it also include the effects of other factors such as the economy and weather on actual versus forecasted sales?

6. If you answered yes to Question #5, should it be necessary for a utility to propose additional energy efficiency spending before it could seek recovery of any lost revenues due to other factors?

7. If a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, should it still recover lost revenues?

8. What are the key components of a decoupling mechanism?

Changes in a utility's sales are brought about by rising natural gas prices, the call for conservation measures, warming weather trends, the involvement of the utilities in gas efficiency

programs, and other events. The state of Oregon Public Utility Commission had a study completed of Northwest Natural Gas's (NW Natural) decoupling program by Christensen Associates (Christensen) in Madison. In that study, Christensen was unable to determine the exact percentages of recovered margins associated with energy conservation programs, economic activity, and price changes. Christensen's conclusion as a result of its study was that weather and price were the major drivers of changes in residential and commercial use per customer over the time period of the analysis. Christensen also found that the utility's sponsored conservation efforts have not had a statistically significant effect on use per customer.

A decoupling mechanism may include full decoupling, partial decoupling, or limited decoupling.

1. Full Decoupling

Full decoupling adjusts utility revenues for any deviation between expected and actual sales regardless of the reason for the deviation. A variation of the full-sales adjustment clause is the per-customer method, which sets a per-customer revenue target. Decoupling does not change the traditional rate case procedure but, in its simplest form, adds an automatic "true-up" mechanism that adjusts rates between rate cases based upon the over- or under-recovery of target revenues. This is the method currently proposed by WPSC in docket 6690-UR-119.

According to a Briefing Paper by Ken Costello, Senior Institute Economist of the National Regulatory Research Institute (NRRI),[3] there are numerous arguments in favor of full decoupling. Some of these arguments are:

1. Under standard ratemaking, energy efficiency initiatives harm utility shareholders between rate cases. The extent of the harm may depend on the amount of time between rate cases in each state.

[3] Costello, Ken, NRRI, (April 2006), *Revenue Decoupling for Natural Gas Utilities*.

2. It is unfair to have a utility promote energy efficiency when it harms its shareholders, as the utility has a fiduciary responsibility to maximize returns for its shareholders.

3. Standard ratemaking steers a utility away from initiating energy efficiency actions, some of which may be cost-effective, or, when forced to promote energy efficiency activities, utilities will do so lackadaisically.

4. A utility is entitled to a reasonable opportunity to recover fully its previously authorized fixed costs between rate filings, even when energy efficiency initiatives and other factors adversely affect revenues over this period.

On the other side of the debate, the NRRI Briefing Paper points out a number concerns expressed about full decoupling:

1. Decoupling ignores the traditional ratemaking process, which employs a balanced review of jurisdictional expenses, rate base investment, the cost of capital and revenues at present rates during the test year. In addition, actual costs are likely to differ from test-year revenue requirements for many reasons. It may be inappropriate, therefore, to adjust rates when actual sales deviate from "baseline" or test year sales while not making adjustments for expenses and other revenue requirement components of the base rate.

2. In theory and practice, regulation does not guarantee a utility to earn its authorized rate of return because of increased competition, economic trends, and changes in consumption behavior (for example, reduced sales because of high prices) and technology that may move against the industry or an individual utility.

3. Existing conditions do not warrant a true-up mechanism that passes on risks to consumers (i.e., extraordinary conditions do not exist). In other words, financial distress has not been proven.

4. No evidence exists to support full decoupling as necessary for the successful implementation of utility-funded energy efficiency initiatives.

An alternative to full decoupling is partial decoupling. This type of decoupling insulates only a portion of the utility's revenue collections from deviations of actual from expected sales. Any variation in sales results in a partial true-up of utility revenues (for example, in Oregon NW Natural was permitted to recover only 90 percent of the revenue shortfall).

Another alternative to full decoupling is to approve it subject to conditions. The Commission may want to consider some of these conditions for a transition period if it approves full decoupling. Some possible conditions which have been approved in other states are:

1. The need for a rate-adjustment cap (for example, limit annual rate adjustment to a percent of the base charge). Similar caps in other states limit the rate adjustment to 3-10 percent.
2. Revenue adjustments to reflect new customers.
3. Accounting for quality-of-service effects.
4. Return on equity limits with or without earnings sharing.

Another alternative to full decoupling is to combine it with some type of performance incentive as discussed under Question #9. Some decoupling proponents have argued that removing disincentives is not enough. In order to make efficiency investments profitable when compared to other possible investments that the utility could make, such as power plants or transmission, performance incentives for efficiency would reward utilities that invest in successful programs by allowing them to earn an equivalent rate of return on those investments.

2. Limited Decoupling

Limited decoupling (also referred to as Lost Revenue Recovery Mechanism) is designed to recover lost margins that result as sales fall below test-year levels due to the success of energy efficiency programs. Limited decoupling differs from full decoupling mechanisms in that it does not attempt to decouple revenues from sales, but rather attempts to isolate the amount of under-recovery of margin revenues due to the energy efficiency programs. Revenues continue to be susceptible to variations in sales from all other causes.

The principal advantage of lost revenue adjustments relative to full decoupling mechanisms is that they limit revenue adjustments to energy efficiency efforts, while full

decoupling may compensate the utility for consumption declines due to economic or other factors. This method still removes the disincentive to energy efficiency investment in approved programs caused by under-recovery of allowed revenues but may be more acceptable to parties uncomfortable with full decoupling.[4] This is the mechanism proposed by WP&L in docket 6680-UR-116 for its electric operations.

There are a number of disadvantages associated with this approach to promoting energy efficiency:[5]

1. It is administratively burdensome, requiring that energy-efficient savings be verified, and the energy-saving effects be estimated through costly program evaluations. It becomes even more burdensome when there is a statewide program such as Focus on Energy and the savings due to the statewide program must be separated from the savings due to a utility's own programs.

2. It addresses only those programs that *can* be verified or are associated with relatively easily counted adoptions.

3. Lost revenue adjustments encourage programs that look good on paper, but may not actually deliver reductions in usage.

4. With only lost revenue adjustments, the utility may be discouraged from backing more general efficiency efforts.

5. Lost revenue adjustments do not protect the utility from margin loss due to efficiency efforts undertaken by customers outside of formal utility programs.

6. In times of declining prices, lost revenue adjustments do nothing to prevent over-recovery on the part of the utility due to increased energy use.

Whether a decoupling mechanism considers only the effects of additional energy efficiency spending (limited decoupling) or also the effects of other factors (full decoupling) depends on the objective of the mechanism. If the sole objective is to remove the disincentives

[4] National Action Plan for Energy Efficiency (2007). *Aligning Utility Incentives with Investment in Energy Efficiency*. Prepared by Val R. Jensen, ICF International. www.epa.gov/eeactionplan.

[5] Hanson, Daniel G. and Braithwait, Steven D., Christensen Associates (March 31, 2005), *A Review of Distribution Margin Normalization as Approved by the Oregon Public Utility Commission for Northwest Natural*.

to utility promotion of energy efficiency or to spend additional funds on energy efficiency activities beyond the level required by law, then the Commission may want to consider a mechanism that addresses only deviations in sales due to energy efficiency achievement. If the objective is to not only remove the disincentives to energy efficiency, but also to remove a utility's incentive to make more sales than were forecast in its rate case, then the Commission may want to consider full decoupling to eliminate the effects of other factors such as the economy and weather.

Designing an effective decoupling mechanism also depends on the difficulty of implementing full decoupling and limited decoupling programs. WPSC, NSPW, and the JPI criticize limited decoupling mechanisms that consider only the effects of additional energy efficiency spending on the grounds that they are difficult to forecast and verify.

As to whether a decoupling mechanism should consider only the effects of additional energy efficiency spending or should also include the effects of other factors, responses to this question were mixed. WPSC, NSPW, and the JPI, answer no. WP&L, WEPCO, MGE, and the ICG answer yes.

JPI favors a "revenue per customer" decoupling mechanism, a fixed cost true-up approach, which allows the utility to recover authorized gross margins. This mechanism, according to JPI: (1) effectively addresses the utility incentive to sell more than test year sales; (2) mitigates the risk to utility financial interests from all sources of public policy or private actions to reduce energy use; (3) is easy to administer and prevents gaming; and (4) is flexible enough to accommodate special circumstances. (JPI Comments, pages 12-13)

According to JPI, "… quantifying the impact of a utility energy efficiency program does not change the impact of other risks faced by a utility whether it is the weather, economy or

savings efforts by others. In this regard, it does not offset the 'throughput incentive' and is not a method supported by the JPI." In addition, "A 'full decoupling' mechanism seeks to eliminate the 'throughput incentive' in its entirety by removing all nature of risks to the recovery of the level of fixed costs whether subject to the utility's control or not (e.g. weather, economic activity *et al*.). 'Full decoupling' addresses all risks that cause a utility to under or over recover its authorized level of fixed costs not only from utility initiatives, but also from other sources such as third party program activity, increased consumer efficiency due to higher prices or improved rates, or a motivation to mitigate the potential of global warming impacts, and the effect of improved codes and standards." (JPI Comments, page 10) Thus, in JPI's opinion, a "lost revenues recovery clause" is a limited response that will not effectively align a utility's private financial interest with the public interest in a meaningful manner. (JPI Comments, page 11)

JPI maintains that there are three attributes of a lost revenue recovery mechanism that make it less effective in removing the disincentives to a utility for aggressive actions that save substantial energy:

1. It does not remove the throughput incentive;
2. It is limited only to the direct quantifiable impacts of a utility program, thus leaving a barrier to other efforts to reduce usage;
3. Its application requires sophisticated (and potentially costly) measurement often resulting in contentious arguments about what a specific utility program actually saved. (JPI Comments, pages 10-11)

ICG counters that if the methodology used does not appropriately isolate the energy efficiency component of lower consumption, utilities would be unduly compensated and rates would increase unnecessarily, harming customers. ICG maintains that it would be unjust and unreasonable to provide compensation for lost margin for factors unrelated to energy efficiency.

The recovery of lost margin is meant to make the utility indifferent to lower consumption for the purpose of pursuing energy efficiency and nothing else. In addition, ICG maintains that providing compensation for lost margin for factors unrelated to energy efficiency is unfair and unreasonable, since it transfers all the extraneous risk to customers and dilutes utilities' incentive to provide reliable, satisfactory, and economical service. Actually, ICG rejects both limited and full decoupling. It prefers the current, simpler rate-setting method that employs no decoupling mechanism. ICG does not favor replacing this method with more complicated rate-setting that it says would result in questionable accuracy, high administrative burdens, and unmanageable programs. Either way, ICG believes that a decoupling mechanism produces unreasonable and sub-optimal results for customers. (ICG Comments, pages 24-26)

While MGE responded that a decoupling mechanism should consider only the effects of additional energy efficiency spending, it also agreed that such a mechanism would be complex and controversial. According to MGE, the complexity can be minimized only if full decoupling is implemented, which MGE does not recommend. (MGE Comments, page 2)

WP&L indicates, "The impacts of weather and the economy have always been present in the utility business and we have little ability to impact them. Not so with energy efficiency. To remove the disincentives associated with increased energy efficiency programming, decoupling mechanisms should not include impacts other than those introduced by energy efficiency." (WP&L Comments, page 5)

Only two parties responded to Question #6. According to WPSC, "It is necessary to recognize that there are two separate issues to be addressed. Full revenue decoupling is a ratemaking policy issue to recognize the changes in energy use and how that affects the utility. It is an energy policy issue whether energy efficiency should have an expanded role in a society

that is changing its views on energy and how it is used." (WPSC Comments, page 3)
JPI maintains, "The JPI believe that it should be necessary for a utility to commit to additional energy efficiency funding and support for additional energy efficiency efforts such as improved building codes and appliance standards to receive any assured means to recover its authorized fixed costs. It should also be preferable for utilities to adopt improved rate designs and significant initiatives for customer-sited renewable resources. The reason why such real world actions should be required is because without such actions a 'lost revenue recovery clause' or a 'decoupling' mechanism becomes little more than a risk reduction clause without significant public and consumer benefits." (JPI Comments, page 11)

Regarding Question #7, most parties who responded to this question agreed that lost revenues due to energy efficiency programs should still be recovered regardless of whether the overall sales are equal to or greater than forecast, or the utility is either earning its authorized return on equity (ROE) or is within some range of its authorized return. Several parties suggest that not allowing recovery would be another disincentive.

In its comments WEPCO maintains that to the extent efficiency spending reduces consumption or causes lost revenues, the utility should be made whole by the mechanism employed. If the utility is not allowed to recover this amount, an additional disincentive to promoting programs is introduced. (WEPCO Comments, page 4) WPSC states, "Disallowing a lost revenue recovery mechanism if the utility is earning its ROE or is within a bandwidth of ROE appears to be a disincentive to deal with the mechanism at all." (WPSC Comments, page 3)

Finally, as to the key components of a decoupling mechanism (Question #8), according to MGE, decoupling should be transparent so all parties understand the calculations; should not

include an earnings test; and should be easy to administer. (MGE Comments, page 2) WP&L maintains that a decoupling mechanism should allow a utility the opportunity to earn its authorized rate of return while achieving efficiency goals for customers. (WP&L Comments, page 3) WPPI suggests that the Commission should not blur the delineation between retail and wholesale jurisdictions, and therefore should allocate costs associated with retail decoupling only to the retail jurisdiction. (WPPI Comments, page 4)

As to whether a decoupling mechanism should consider only the effects of additional energy efficiency spending (limited decoupling) or also include the effects of other factors such as the economy and weather on actual versus forecasted sales (full decoupling), the Commission alternatives are:

Alternative One: Limited decoupling that only considers the effects of additional energy efficiency spending is a reasonable ratemaking mechanism for the Commission to consider that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.

Alternative Two: Full decoupling that considers any deviation between expected and actual sales, regardless of the reason for the deviation, is a reasonable ratemaking mechanism for the Commission to consider that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.

Alternative Three: Full decoupling with specified conditions that considers any deviation between expected and actual sales, regardless of the reason for the deviation, is a reasonable ratemaking mechanism for the Commission to consider that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.

Alternative Four: Neither limited decoupling nor full decoupling is a reasonable ratemaking mechanism.

If the Commission selects limited decoupling, the Commission alternatives when it decides whether it is necessary for a utility to propose additional energy efficiency spending, before the utility could seek recovery of any lost revenues due to other factors, are:

Alternative One: A utility must commit to additional energy efficiency spending and support for additional energy efficiency efforts before it could seek recovery of any lost revenues due to factors other than energy efficiency.

Alternative Two: A utility need not commit to additional energy efficiency spending and support for additional energy efficiency efforts before it could seek recovery of any lost revenues due to factors other than energy efficiency.

Regarding whether a utility should still be able to recover lost revenues if a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, Commission alternatives are:

Alternative One: A utility should still be able to recover lost revenues in these circumstances.

Alternative Two: A utility should not be able to recover lost revenues in these circumstances.

Regarding the key components of a decoupling mechanism, Commission alternatives are:

Alternative One: The key components of a decoupling mechanism are as set forth above.

Alternative Two: The key components of a decoupling mechanism are as set forth above with certain Commission approved modifications.

9. What types of ratemaking mechanisms, other than full or limited decoupling, should the Commission consider that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers?

There are a number of ratemaking mechanisms other than decoupling that regulators employ to encourage utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers. Each has strengths and limitations. Some of these mechanisms are:

1. Straight Fixed Variable (SFV) Rate Design
2. Current Commission Rate Case Process and Wisconsin Statutes
3. Performance Incentives
4. Municipal Deferrals

As JPI maintains, "The key to success will be to develop appropriate mechanisms that are well designed and delivered to allow customer benefits to be large enough so that sharing some of them to reduce utility risk will still leave all parties better off than if less investment had been made due to misaligned incentives." (JPI Comments, page 2) The above ratemaking mechanisms are discussed below.

1. SFV Rate Design

SFV rate design imposes a fixed charge on customers, which is set to recover all the utility's "fixed" costs. SFV pricing, like decoupling, eliminates utility earnings variability due to sales volume changes. Like decoupling, SFV pricing leaves earnings variation due to inflation, cost controls, changes in interest rates, and other causes unaffected. The cost of capital effect of SFV pricing should be similar to that for decoupling. From an economic efficiency standpoint,

SFV pricing represents the most appropriate pricing method, as long as rates are set correctly to reflect fixed and variable costs.

Arguments in support of SFV rate design are:[6]

1. It removes the utility's incentive to promote increased sales.

2. It may align better with principles of cost-causation.

Arguments in opposition to SFV Rate Design are:

1. It may not align with cost causation principles for integrated utilities, especially in the long run.

2. It can create issues of income equity.

3. Movement to an SFV rate design can significantly reduce customer incentives to reduce consumption by lowering variable charges (applies more to electric than gas utilities).

This is the mechanism proposed by WP&L in docket 6680-UR-116 for its natural gas operations. In its comments WEPCO maintains that for natural gas utilities, prices that recover fixed costs in fixed rates and variable costs in volumetric rates will mitigate disincentives and provide the customer an incentive to reduce consumption levels. (WEPCO Comments, page 5)

2. Current Commission Rate Case Process and Wisconsin Statutes

Regarding the current Commission rate case process, all major utilities in Wisconsin are required to file biennial rate cases using a forward-looking test year. For new sales forecasts, this allows utilities to reflect the historical energy efficiency achievement trend and updated estimates of increases in this trend. Utilities, therefore, have a reasonable opportunity to recover lost revenues and improve their chances of earning their authorized return. As part of the biennial rate case process, utilities are not precluded from requesting reopeners or emergency

[6] National Action Plan for Energy Efficiency.

filings where unusual circumstances exist. In addition, escrow accounting is used for energy efficiency investments, providing for full-cost recovery. Also, if a utility undertakes new energy efficiency programs between rate cases and the dollar amount is expected to be large before its next rate case, a deferral could be used.

Given that Wisconsin has biennial rate cases based on a forward-looking test year, lost revenues are somewhat contained and the current structure may not provide a significant disincentive to the current level of energy efficiency efforts.

Like a number of states, Wisconsin has approved the establishment of statewide energy efficiency programs by statute. These programs are funded through utility charges and are organizationally distinct from the utilities because third parties administer the programs. The energy efficiency organizations receive funding, make expenditures, and are accountable to regulators, but are not electric or natural gas utilities, and therefore have no concern about lost distribution margins. Their incentive (to retain their status) is to deliver reliable and economic efficiency savings.

Wisconsin Stat. § 196.374(3)(b)2. requires each energy utility to spend 1.2 percent of operating revenues on energy efficiency and renewable resource programs. Enacted in March 2006, 2005 Wisconsin Act 141 (Act 141) allows the Commission to require, subject to legislative approval, each energy utility to spend a percentage larger than the Act 141 required 1.2 percent of operating revenues on energy efficiency and renewable resource programs. Current Wisconsin statutes, therefore, help avoid the utility's disincentive for investment in energy efficiency by removing the utility's role in energy efficiency, except as a revenue collection mechanism.

As a result of the Commission's current rate case process and Wisconsin statutes, an alternative to decoupling is to rely on business as usual and not make any changes at this time. This is especially true if the Commission is only concerned with the effects of additional energy efficiency spending. This approach does not, however, alleviate the throughput issue and the associated impacts on the utility's revenues.

In response to the survey in this docket ICG states, "Overall, the current ratemaking practice maintains regulatory oversight to protect customers while providing mechanisms whereby utilities can regularly update their sales forecast and request revised cost recovery to protect their bottom line and mitigate risk for their investors. Consequently, in Wisconsin practice there is little room for distortions because of the frequent rate case applications. Therefore, ICG believes that no adjustments are needed." ICG contends that the perceived problems are not due to current practices. Instead of decoupling, the ICG maintains that the Commission should: (a) continue to mandate Focus on Energy; (b) leverage the core competencies of Focus on Energy; (c) limit distortions and risk through biennial rate cases with a reopener and fuel case options; and (d) utilize the SFV method. ICG notes that utilities, to further eliminate risk due to lower retail consumption can sell saved MWh in the MISO market. (ICG Comments, pages 3-8, 27-28, 30-31)

One possible modification to business as usual is, under Wisconsin's biennial rate case schedule for major energy utilities, to true-up the difference in actual and forecast sales in the second year of the biennium. This idea was expressed as Question #13 of the survey. Question #13 asks, "Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these

programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small)."

The parties who responded to Question #13 differ as to whether the above modification to the current rate case process would be useful in removing disincentives to utilities promoting these programs. WP&L states that this alternative could help reduce the need for decoupling adjustments, but simply adjusting the sales forecast without a subsequent review of actual energy efficiency achieved does not fully address the risks to the utility associated with existing programs and may act as an artificial ceiling on efficiency efforts. (WP&L Comments, page 5) WEPCO states that the above alternative is an acceptable approach and may be worthy of further review. (WEPCO Comments, pages 5-6)

NSPW believes that this method could be useful in removing a disincentive to utilities that promote energy efficiency. (NSPW Comments, pages 4-5) MGE agrees, stating that this alternative could protect the utility from lost revenues resulting from new programs initiated between rate adjustment periods. According to MGE, as long as adjustments are limited to the specifics of the program, this modification may remove the disincentive for expanding energy efficiency programs. (MGE Comments, page 3) WPSC, however, does not believe the above alternative will be useful in removing disincentives to utilities promoting these programs. (WPSC Comments, pages 4-5)

JPI states that a test year forecasting approach as described above should be done. However, JPI is not sure that this approach by itself will be sufficient depending on the potential magnitude of increased energy efficiency or other efforts that may result in decreased actual sales. Since fixed costs, including rate of return, are collected on the margin, their recovery is sensitive to the degree that actual sales and revenues decrease. (JPI Comments, pages 16-17)

3. Performance Incentives

A decoupling mechanism in and of itself does not promote energy efficiency. That is why some proponents of decoupling claim that performance incentives are needed in addition to decoupling in order to really promote energy efficiency. Performance incentives for superior performance can be used under traditional rate regulation as well as under decoupling. They may not, however, elicit the same responses in both cases. Commissions in numerous states have attempted several types of incentives for energy efficiency in the past, and the results have been mixed.

Incentives for utilities to undertake energy efficiency investments can be provided in a number of ways, including:

1. Performance target incentives.
2. Shared savings incentives.
3. Rate of return adders.

Performance target incentives provide payment for achievement of specific savings targets. Shared savings mechanisms provide utilities the opportunity to share with ratepayers the net benefits resulting from successful implementation of energy efficiency programs. In theory, these can be large enough to overcome the throughput incentive. Shared savings incentives are currently used by WP&L.

A rate of return adder is a bonus to the allowed rate of return for energy efficiency programs. It can be tied to the level of investment (higher allowed return on equity for energy efficiency investments) or tied to the level of performance (a bonus based on achieving specific targets). This is similar to WP&L's shared savings program. In addition, the Commission used rate of return adders tied to the level of investment in the 1980s and 1990s as part of capitalized conservation programs. A rate of return incentive can work with a decoupling mechanism. The decoupling mechanism would eliminate the throughput incentive, while the rate of return incentive would provide a positive reward for conservation performance. A rate of return incentive can also be incorporated into the ordinary rate case process, which is what the Commission did in the 1980s and 1990s. (The Commission eliminated these capitalized conservation programs in the 1990s at the request of the utilities.)

Rather than lost revenues, ECW argues that lost assets are the larger problem. ECW states, "Under traditional rate base regulation, there is no mechanism to address lost asset impacts. That is, the process is not designed to make the utilities whole *for investments that they did not make*, either in the short run or the long run.… As long as utility executives expect that they can earn reasonable returns on future supply-side investments, even with a lost revenue adjustment mechanism in place, there will be a disincentive for the utility to procure demand-side, in lieu of supply-side, resources." (ECW Comments, page 6; emphasis in original) ECW explains:

> There are two factors that could change this conclusion, one that involves Commission policy and one that flows from external events.
>
> - Commission policy: Utilities could be allowed to earn returns when they make demand-side investments. This could be in the form of returns on utility energy efficiency expenditures, or bonus rate of return awards in general.

- Capital market conditions: Financial market circumstances could change in ways that make adding supply-side assets more difficult, and make energy efficiency programs necessities rather than luxuries. (ECW Comments, page 7)

As to the first item, if the Commission were to allow utilities to earn returns on demand-side expenditures, rather than expensing them, it would reduce the lost assets impact to some extent. Under such an approach, the utilities would be making *de facto* rate base additions, which would offset the impact of the supply-side additions that were deferred by the energy efficiency programs. (ECW Comments, pages 6-7; emphasis in original)

Finally, ECW states, "In addition, the appropriate rate of return would need to be determined with care. If demand-side resources have a different risk profile than supply-side assets, the rate of return could be different for the two types of investments." (ECW Comments, page 7)

WEPCO states, "From a cost-recovery perspective, allowing a return for the utility's investment in energy efficiency programs as a form of alternative generation would have the effect of attracting capital to support such initiatives, thereby replacing not increasing costs of generation that would necessarily push consumer prices up." (WEPCO Comments, unnumbered page 4) In addition, WEPCO states, "Generally speaking, the ratemaking approach that will promote conservation and efficiency programs is an approach that treats utility efficiency and conservation programs the same way generation projects are treated. Capitalization of these program costs allows the utility to earn its authorized return on the projects and does not penalize the utility for decreased sales." (WEPCO Comments, unnumbered page 1)

Performance incentives in other states for achieving targeted savings have been in the form of a percent of the total conservation budget (ranging from 2 to 30 percent depending on

the size of the current budget) or an extra return on equity for energy efficiency investments (Nevada allows an extra 5 percent return). WP&L is also proposing a performance incentive for its electric operations in docket 6680-UR-116.

Arguments in support of utility performance incentive mechanisms are:[7]

1. They promote utility investment in energy efficiency programs.

2. Policy-makers can influence the types of program investments and the manner in which they are implemented through the design of specific performance features.

Arguments in opposition to utility performance incentive mechanisms are:

1. They typically require post-implementation evaluation, which entails the same issues as cited with respect to fixed-cost recovery mechanisms. How to determine if the utility's efforts were directly responsible for increasing energy efficiency can be an added problem. The statewide programs of Focus on Energy make evaluating the cost-effectiveness of a particular utility program especially complex.

2. Mechanisms without performance targets and evaluation can reward utilities simply for spending, as opposed to realizing savings.

3. Mechanisms without penalty provisions send mixed signals regarding the importance of performance.

4. Incentives will raise the total program costs borne by customers and reduce the net benefit that they otherwise would capture.

5. Poorly designed performance incentives can result in unintended consequences.

6. Incentive proposals add another layer of complexity and further increase the administrative burden and practical difficulties associated with this proposal.

4. Municipal Deferrals

WPPI discusses the concept of municipal deferrals as an incentive for municipal utilities to promote energy efficiency programs. It states, "The Commission should permit municipal utilities to engage in deferral accounting of conservation and energy budgets so that utilities have

[7] National Action Plan for Energy Efficiency.

an opportunity in the next rate case to recover incurred expenditures in excess of amounts included in approved rates. The Commission should also permit municipals to establish a capital budget approved in a rate case and earn a return on the utility capital invested directly in energy efficiency projects at their own facilities or in customer facilities." (WPPI Comments, pages 4-6)

The following are alternative incentives, to encourage utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers:

Alternative One: SFV rate design.

Alternative Two: Business as usual, following the current Commission rate case process and Wisconsin statutes, already provides sufficient incentives.

Alternative Three: Business as usual, but true-up the difference in actual and forecast sales for the second year of a rate biennium to account for the impact on sales of newly-developed utility energy efficiency programs.

Alternative Four: Use performance target incentives, shared savings incentives, or rate of return adders, either alone or in combination with full or limited decoupling.

Alternative Five: For municipal utilities, permit deferral accounting of conservation and energy budgets and the establishment of a capital budget that includes amounts invested in energy efficiency projects.

10. Should all customer classes be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending? Why or why not?

11. If your answer to Question #10 is no, should additional energy efficiency programs only be designed to benefit only participating customer classes? Why or why not?

The respondents differ on Question #10. WP&L believes that decoupling should be applicable to all customer classes, although different mechanisms may need to be targeted

toward different customer classes. (WP&L Comments, page 4) NSPW agrees, but only if the decoupling mechanism is limited and not full. It states, "If a decoupling mechanism is narrowly focused on just energy efficiency then all classes could be included. However, larger customers have more incentive to pursue energy efficiency. In a broader focused mechanism, including factors such as weather and decreasing use per customer, NSPW would recommend limiting the mechanism to residential and small commercial customer classes. The larger classes may have usage changes that are not associated with weather or energy efficiency but may be due to shutting down a machine, closing a section of the plant, adding a machine, etc." (NSPW Comments, page 4) MGE suggests that all classes should be included because all classes can become more energy efficient. (MGE Comments, page 3)

WPSC, WEPCO, ICG, and JPI, however, disagree. WPSC states, "No. Large industrial customers should not be included. These customers are already very aggressive in seeking out energy efficient technologies and processes in order to remain competitive in the market place." (WPSC Comments, pages 4-5) ICG believes that decoupling and performance incentives are not practical for large customers. (ICG Comments, page 29) JPI states, "Not necessarily, as customer classes present different sets of circumstances and often require different program designs." (JPI Comments, page 14)

As to the related Question #11, the consensus of the parties is no. WP&L states, "Energy efficiency programs benefit all customers, whether or not they participate in the programs. While participating customers receive the direct benefit of an incentive, low cost financing, grant, etc. all customers share in the system benefits that energy efficiency and conservation efforts produce." (WP&L Comments, page 4)

ICG states, "No; additional energy efficiency programs should not be designed to benefit only participating customer classes (should decoupling or performance incentive mechanisms be implemented for participating classes only).… It would be unreasonable to eliminate the non-participating industrial class that contributes significantly and efficiently, providing system-wide benefits through the implementation of energy efficiency initiatives." (ICG Comments, page 30)

Finally, according to ECW, "Across-the-board responsibility for lost revenues implies that there are opportunities for everyone to become more efficient. Excluding certain customers from decoupling revenue responsibility implies that those customers are about as efficient as they can be. This is where the program issue intersects with the revenue responsibility. It would appear to be inherently unfair to offer energy efficiency programs only to a limited set of customers, while allocating lost revenue responsibility to all customers." ECW also states, "An intermediate course would be to have separate decoupling or incentive recovery mechanisms for each rate class. Therefore, if one class of customers tends on average to be more efficient than another class, the degree of cross-subsidization would be reduced by restricting the transfers of funds within the class. Nevertheless, this would not avoid the conceptual problem that efficient customers within a class would be subsidizing their less-efficient counterparts." (ECW Comments, page 13)

Commission alternatives as to whether all customer classes should be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending (Question #10) are:

Alternative One: All customer classes should be included.

Alternative Two: Only residential and small commercial classes should be included.

Alternative Three: Different mechanisms may need to be targeted toward different customer classes so this decision will be made on a case-by-case basis.

Commission alternatives as to whether additional energy efficiency programs should be designed to benefit only participating customer classes that participate in a decoupling or incentive mechanism (Question #11) are:

Alternative One: Yes, design additional energy efficiency programs only to benefit participating customer classes.

Alternative Two: No, design additional energy efficiency programs to benefit all customer classes.

12. Do you foresee controversy in determining the amount of reduced kWh sales caused by additional energy efficiency spending and the dollar margin on the reduced sales used to determine the under recovered amount to be included in rates? Why or why not?

This question does not require a Commission decision in this proceeding.

13. Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small).

This question is addressed as part of the discussion under Question #9.

14. Is revenue decoupling illegal retroactive ratemaking? Why or why not?

The general consensus in comments filed in this docket is that decoupling is not retroactive ratemaking. NSPW qualifies its answer, stating, "NSPW does not believe a formulaic approach to decoupling is retroactive rate making. However, coupling a formulaic approach

with an after-the-fact ROE test could, arguably, be considered retroactive ratemaking." (NSPW Comments, page 3). MGE believes that the answer to this question is dependent on the decoupling mechanism proposed. MGE states, "There may be a whole range of potential decoupling mechanisms. Until the precise nature of a mechanism is specified, MGE is unable to comment on the extent to which it may be vulnerable to legal attack on grounds of illegal retroactive ratemaking or otherwise." (MGE Comments, page 3)

Commission alternatives regarding this question are:

Alternative One: Revenue decoupling is not illegal retroactive ratemaking.

Alternative Two: Revenue decoupling may be illegal retroactive ratemaking depending on the mechanism proposed.

15. Are you aware of mechanisms other states use to incent additional energy efficiency on behalf of their utilities that you believe would be successful in Wisconsin? If so, please identify those states?

This question does not require a Commission decision in this proceeding, although it is taken into consideration as part of the discussion of Question #9.

16. Does a decoupling mechanism represent a reduction in risk to the utility? If so, should that be reflected in the authorized return on equity?

A study completed for the Minnesota Public Utilities Commission[8] (MPUC) found that decoupling can significantly reduce earnings volatility due to weather and other factors and can eliminate earnings attrition when sales decline, regardless of the cause. This in turn, lowers the financial risk for the utility, which in turn may be reflected in the company's cost of capital. Reflection of reduced risk, if considered appropriate, can be accomplished in a number of ways. Each way is discussed below.

[8] Shirley, Wayne, Lazar, Jim, and Weston, Frederick, The Regulatory Assistance Project.

The Commission could reduce the utility's allowed ROE, discounting by some number of basis points what would otherwise have been approved. This has been done in a number of jurisdictions. For example, the Maryland Commission reduced the ROE by 50 basis points for two utilities in that state in approving decoupling plans. The Illinois Commission reduced the ROE for People's Gas by 10 basis points in approving a decoupling plan. Any quantification of a change in risk due to decoupling, however, is subject to a wide range of considerations on top of all other factors affecting the ROE as part of a rate case.

The Commission could also reduce the cost of capital resulting from decoupling, if the utility's bond rating improves. This would result in lower costs of debt and equity. However, this generally requires several years to play out and the consequent benefits for customers are slow to materialize.

Finally, the Commission could reduce the equity capitalization ratio of the utility in a rate case. This has the effect of reducing the overall cost of capital and revenue requirement, without changing either the cost of debt or the allowed ROE. A lower equity ratio may be sufficient to maintain the same bond rating for the decoupled utility as for the non-decoupled utility. This would allow the benefits associated with the lower risk profile of the decoupled company to flow through to customers in the first few years after the mechanism is put in place.

In determining whether a decoupling mechanism reduces the risk to a utility, the Commission should take into consideration its decisions regarding Questions #5 and #9. If a decoupling mechanism only considers the effects of additional energy efficiency, spending there is less of a chance that any impact on risk would be significant enough that an adjustment to the cost of capital would be needed. If a decoupling mechanism considers the effects of additional energy efficiency spending and the effects of other factors such as the economy and weather on

actual versus forecasted sales, then there is a greater chance that any impact on risk would be significant enough that an adjustment to the cost of capital may be warranted. The actual decoupling mechanism used may also have an impact on risk. For example, the SFV rate design discussed in Question #9 is designed to recover all "fixed" costs. SFV pricing also eliminates utility earnings variability due to sales volume changes. Both of these results would reduce risk.

Most respondents to the Commission survey in this docket did not believe that the use of a decoupling mechanism should factor into the estimation of the ROE in a rate case. For example, WP&L states, "Reduction in risk is dependent on the decoupling design. A decoupling mechanism focused on eliminating the disincentives associated with increased energy efficiency programming does not eliminate all business risk. Utilities would still be faced with volatility associated with a changing customer base, weather impacts, economic impacts on costs, etc. We do not believe that implementing a decoupling mechanism to address energy efficiency impacts should alter authorized rates of return. Doing so may discourage utilities from actively pursuing aggressive, cost effective conservation and energy efficiency initiatives." (WP&L Comments, pages 5-6) According to NSPW, "A narrow decoupling mechanism restricted to energy efficiency would have an insignificant effect on risk. A broader decoupling mechanism may provide protection against a decline in sales, but it also eliminates any upside from greater than expected sales. It would be hard to convince investors that it makes sense to accept a lower ROE, when they are giving up the potential upside." (NSPW Comments, page 5) WPSC agrees. In its comments WPSC states, "No. There is neither a reduction of risk nor a shift of risk when adopting a decoupling mechanism or a lost revenue decoupling of mechanism. Under either mechanism, the utility must still manage it [sic] costs to within budget to achieve ROE targets, continues to have an obligation to serve and is subject to unforeseen events, outages, legislation,

environmental rules and regulation and acts of God that all could cause a utility to not earn its ROE." (WPSC Comments, page 5)

JPI believes that while decoupling may cause a decrease in financial risk, it is offset by an increase in financial risk if a utility implements new programs or promotes new building and appliance codes. According to JPL, therefore, the issue is the net effect of the increased risk due to new initiatives and the decreased risk due to decoupling compared to the utility's authorized rate of return. JPL also points out that an adjustment to ROE is not the only way to reflect any net change in risk from decoupling. As discussed above, JPL discusses how decoupling may benefit bondholders more than shareholders by decreasing volatility of revenues and that this financial benefit is passed on to customers. (JPI Comments, pages 20-21)

ECW maintains that risks, such as those related to energy efficiency programs or the weather, affect stockholders' cash flow forecasts for the utility, but not their required returns. According to ECW, "This suggests that if the decoupling mechanism addresses impacts only of energy efficiency programs, and not those related to changes in the general economy, then the equity markets will see no reduction in the relevant risk of the utility when the mechanism is implemented."

In its comments ECW states, "… removing the effect of energy efficiency programs via a decoupling mechanism that adjusts for those programs only would likely increase the shareholders' cash flow forecasts, while leaving their required return unchanged. The utility is worth more to investors, but it is just as risky to them as it was before the decoupling mechanism was implemented. On the other hand, if the decoupling mechanism is broad-based, then the mechanism insulates the utility not only from the impacts of energy efficiency programs, but from other factors as well, including changes in macroeconomic conditions (*e.g.*, a recession).

The fact that the utility's exposure to macroeconomic conditions has been reduced would be viewed by shareholders as a relevant risk reduction. Their required return would then decline to some extent. The adjustment, though, would be limited solely to the degree to which the mechanism protected the utility from economic business cycles, and again would not consider any insulation from impacts of weather or energy efficiency programs."

ECW also points out that decoupling will have a relatively larger impact on utility bondholders than it will on utility stockholders. Regarding the impact on bondholders, the market and not the Commission sets bond returns, therefore, the Commission need do nothing to implement the bondholder impact.

Overall, ECW argues that the Commission should not make any adjustments in the ROE for energy efficiency program effects, or for weather-related risks. (ECW Comments, pages 14-17)

Finally, ICG states, "A decoupling mechanism significantly reduces risk for a utility by protecting against lost revenues. Investors will be over compensated if authorized rates of return are not lowered to reflect this lower usage. Therefore, the risk reduction must be reflected in the authorized return to equity. The ICG has some concern, though, that it will be difficult if not impossible to tie directly a reduction in a utility's rate of return to the adoption of a decoupling mechanism because so many different elements must be considered in determining a utility's risk profile." (ICG Comments, page 32)

Commission alternatives, regarding the impact of a decoupling mechanism on a utility's financial risk and how any impact should be reflected in the authorized return on equity, are:

Alternative One: No reduction in a utility's authorized return on equity is appropriate to reflect the impact of a decoupling mechanism on the utility's financial risk.

Alternative Two: In each rate case where the utility proposes to implement any decoupling mechanism, the authorized return on equity should be adjusted to reflect a reduction in the utility's financial risk.

Alternative Three: In each rate case where the utility proposes to implement a full decoupling mechanism, the authorized return on equity should be adjusted to reflect a reduction in the utility's financial risk.

Alternative Four: Since the implementation of a decoupling mechanism may impact a utility's financial risk, a reduction in the authorized return on equity should be considered in each rate case when the utility proposes a decoupling mechanism.

Alternative Five: In each rate case where the utility proposes to implement any decoupling mechanism, the authorized common equity percentage should be adjusted to reflect a reduction in the utility's financial risk.

Alternative Six: In each rate case where the utility proposes to implement a full decoupling mechanism, the authorized common equity percentage should be adjusted to reflect a reduction in the utility's financial risk.

Alternative Seven: Since the implementation of a decoupling mechanism may impact a utility's financial risk, an adjustment to the authorized common equity percentage should be considered in each rate case when the utility proposes a decoupling mechanism.

17. What process should the Commission use to establish the parameters of ratemaking approaches that promote energy efficiency; i.e., should the Commission approve utility-specific plans or establish guidelines for implementation in rate cases? (Uncontested)

Responses to the survey in this docket all appear to agree that general policy guidelines should be developed in this proceeding and specific utility plans should be approved in a rate case.

Uncontested Alternative: General policy guidelines should be developed in this proceeding and specific utility decoupling plans should be approved in each utility's rate case.

18. Are there important differences between natural gas and electric utilities to be considered when designing an incentive mechanism?

Decoupling is fundamentally the same for both gas and electric utilities. However, the two industries are facing different underlying trends in customer revenues. While the natural gas industry generally faces declining average revenues per customer over time, the electric industry is experiencing increasing average revenues per customer. As a result, natural gas utilities tend to face revenue and profit erosion between rate cases, while electric utilities garner increasing revenue and profits between rate cases.[9]

In addition to use per customer, most of the respondents indicate there are other differences between these utilities. First, commodity costs in the natural gas business represent the largest portion of customer bills and thus, in and of themselves, provide a strong conservation incentive. Second, a majority of natural gas utility revenues are already subject to a decoupling mechanism of sorts. The Purchased Gas Adjustment Clause and its associated true-up provisions provide a match of revenues and commodity expenses to sales volume variances. Third, the

[9] The National Association of Regulatory Utility Commissioners (September 2007), *Decoupling for Electric & Gas Utilities: Frequently Asked Questions.*

timing of price changes may impact customer elasticity response differently and will be further influenced by the magnitude of the price change. Fourth, the impact weather has on natural gas sales is much greater compared to electric sales. Finally, the natural gas utilities are experiencing a continuing reduction in demand, unlike the electric utilities. (WP&L Comments, page 6; WEPCO Comments, pages 7-8; WPSC Comments, page 6; MGE Comments, page 4; NSPW Comments, page 6; JPI Comments, pages 21-22)

At this time natural gas decoupling plans are much more common than electric decoupling plans. As to whether it makes more sense to have decoupling for electric operations than natural gas operations again depends on the objective of decoupling. The main objective of decoupling for natural gas utilities appears to be recovery of fixed costs. Another objective appears to be controlling the demand for natural gas, which is in limited supply. Both of these objectives also apply to electric operations, although the recovery of fixed costs is not as significant for electric operations as it is for natural gas operations. For electric operations, however, an even more significant objective is improving energy efficiency to avoid harmful environmental impacts and the need to build additional generating plants. New generation plants are very expensive at a time when energy prices are also high due to fuel prices and the need to build new infrastructure. Not only is energy efficiency a low-cost alternative for meeting the demand for electricity, it is also the best environmentally-friendly alternative.

Commission alternatives regarding the differences between gas and electric utilities to be considered when designing an incentive mechanism are:

Alternative One: Some form of decoupling mechanism is appropriate for both a utility's electric operations and natural gas operations.

Alternative Two: Some form of decoupling mechanism is only appropriate for a utility's electric operations.

Alternative Three: Some form of decoupling mechanism is only appropriate for a utility's natural gas operations.

Alternative Four: Some forms of decoupling mechanism are appropriate for both a utility's electric operations and natural gas operations, but there are differences to be taken into account when designing an incentive mechanism.

Questions #19 through #24 are in addition to the 18 questions asked in the survey in this proceeding.

19. Depending on what type of mechanism is proposed by a utility, what type of information should be filed to support the proposed mechanism?

A report to the MPUC[10] includes a list of elements the MPUC may want to consider requiring a utility to file to support the implementation of a proposed decoupling mechanism. This list is attached as Appendix C. In addition to all supporting testimony and data a utility customarily files in a Wisconsin base rate proceeding, the Wisconsin Commission may also want to consider requiring the utility to file the information shown in Appendix C in support of a proposed decoupling plan.

Alternative One: In support of a decoupling plan a utility should file the information shown in Appendix C.

Alternative Two: In support of a decoupling plan a utility should file the information shown in Appendix C as amended.

[10] Based on Shirley, Wayne, Lazar, Jim, and Weston, Frederick, The Regulatory Assistance Project.

Alternative Three: It is not necessary for the Commission to specify what information a utility should file in support of a decoupling plan.

20. What criteria should the Commission consider in evaluating any decoupling proposal?

A report to the Minnesota Public Utilities Commission (MPUC)[11] includes a list of criteria the MPUC may want to consider in evaluating a proposed decoupling mechanism. This list is attached as Appendix D. In evaluating any decoupling proposals the Wisconsin Commission may want to consider the criteria shown in Appendix D.

Alternative One: In evaluating any decoupling proposals the Commission may want to consider the criteria shown in Appendix D.

Alternative Two: In evaluating any decoupling proposals the Commission may want to consider the criteria shown in Appendix D as amended.

Alternative Three: In evaluating any decoupling proposals it is not necessary for the Commission to specify in advance what criteria it will consider.

21. Are hearings required every time bills go up to recover lost sales?

Whether hearings are required before a utility may impose a decoupling rate increase depends on the proper interpretation of two state statutes. The first statute, Wis. Stat. § 196.20(4), prohibits electric utilities from implementing automatic adjustment clauses. This statute declares, "An electric public utility may not recover in rates any increase in cost, including fuel, by means of the operation of an automatic adjustment clause." Wis. Stat. § 196.20(4)(b). The law defines "automatic adjustment clause" as a provision the Commission includes in an electric utility's rate schedule, after notice and a hearing, that allows the utility to

[11] Ibid.

recover in its rates, without another hearing or Commission order, an increase in the utility's costs. Wis. Stat. § 196.20(4)(a)1.

This first statute prohibits automatic electric utility rate increases without a prior rate hearing, if the rate increases are caused by utility cost increases. However, this statute probably does not apply to a decoupling mechanism because decoupling is about sales decreases, not cost increases. Automatic decoupling rate increases are triggered by the lost margin problem due to actual sales that are lower than forecasted levels. Such a rate increase would not be regulated by Wis. Stat. § 196.20(4).

The second statute the Commission must consider is Wis. Stat. § 196.20(2m). That statute provides, "[N]o change in schedules which constitutes an increase in rates to consumers may be made except by order of the Commission, after an investigation and opportunity for hearing." Unlike Wis. Stat. § 196.20(4), this statute's proscription is not limited to rate increases that are driven by increases in utility costs.

In *Wisconsin's Environmental Decade v. Public Service Commission*, 81 Wis. 2d 344, 351, 260 N.W.2d 712 (1978), the state supreme court considered whether an automatic adjustment clause that the Commission had approved in WEPCO's rates violated Wis. Stat. § 196.20(2m) [at the time, the statute was numbered § 196.20(2)]. The court ruled that this "expanded" adjustment clause, which allowed WEPCO automatically to increase its rates if it experienced cost increases in fuel, supplies, labor, purchased power, or numerous other areas, was illegal. WEPCO argued that the Commission had provided the statutorily-required public hearing when it first approved the adjustment clause, and that the rate increases were merely a mechanical application of the adjustment clause's formula. WEPCO maintained that for these reasons no new hearing was required. *Id*. at 349. The court disagreed. Although it considered

the law ambiguous as to whether the hearing that the Commission provided when it adopted the expanded adjustment clause in the first place met the statutory requirement, the court concluded that the adjustment clause also conflicted with Wis. Stat. §§ 196.19(3) and 196.21, which require that rates must be publicly posted so ratepayers can verify the accuracy of their bills. The effect of an expanded adjustment clause, the court ruled, "is to defuse, in part, public awareness of changes in utility rates, and to reduce public scrutiny of these changes." *Id*. at 349 and 350.

WPSC argues that Wis. Stat. § 196.20(2m) would not require a hearing before a rate increase caused by decoupling. WPSC distinguishes a decoupling mechanism from the expanded adjustment clauses that the supreme court invalidated in *Wisconsin's Environmental Decade*, because it states that "none of the reasons the *Decade* court cited for the unlawfulness of an expanded fuel adjustment clause applies to decoupling, which is limited to one component of the utilities rates (revenues) and incorporates a very simple formula." (WPSC Comments, Attachment A to Question 14, n. 2)

The applicability of Wis. Stat. § 196.20(2m) to rate increases caused by decoupling is not a settled area of law. Under a more conservative analysis, the Commission could conclude that this statute requires it to grant parties to a rate case an opportunity to request a hearing and issue a rate-setting order, before a decoupling mechanism that increases rates may take effect.

In the alternative, the Commission could hold a hearing and issue a rate-setting order before allowing a utility to implement a decoupling rate increase. The hearing could be confined to the issue of whether the utility's sales revenues are below forecasted levels and, if the Commission has authorized limited decoupling, whether the cause of the decline in sales is energy efficiency programs. To control the volume of rate hearings and conserve the

Commission's resources, the Commission could restrict the number of times that the utility may seek a decoupling rate increase, such as once per year.

The Commission could also establish the parameters for a decoupling rate increase in the rate case where it approves a decoupling mechanism. In a utility's rate proceeding, the Commission could authorize a particular electric rate increase for the first test year of the biennium, approve a decoupling mechanism, and declare the maximum authorized increase that the utility may impose in the second test year because of decoupling. Doing so would comply with Wis. Stat. § 196.20(2m) because the rate case hearing and Commission order would address issues relating to both the initial rates and the maximum allowed decoupling rates. This would not prevent a utility from requesting a decoupling rate increase that exceeds the maximum allowable level, but if it did so Wis. Stat. § 196.20(2m) would require that the Commission first offer parties the opportunity for a hearing and then approve the rate increase.

Alternative One: Determine that the Commission need not offer parties the opportunity for a hearing under Wis. Stat. § 196.20(2m) before a utility can increase rates under a decoupling mechanism.

Alternative Two: Offer parties the opportunity for a hearing and issue a rate-setting order before a utility may increase rates because of decoupling

Alternative Three: Offer the parties the opportunity for a hearing before a utility may increase rates because of decoupling, but restrict the issues to be heard and limit the number of times per year that a utility may propose rate increases because of decoupling.

Alternative Four: Hold a rate-setting hearing for a utility and issue an order that sets rates, approves a decoupling mechanism, and prescribes the maximum decoupling rate increase that the Commission may impose in the second year of its biennial rate period. At the rate

hearings establish the biennial rates, the contours of the decoupling mechanism, and the maximum allowable level of decoupling increases. Permit decoupling increases higher than this maximum allowable level only after the Commission offers parties a new opportunity for hearing and the Commission approves the higher increase.

22. How frequently should decoupling adjustments be made?

The frequency of decoupling adjustments in other states can be monthly, quarterly, semi-annually, and annually. In some cases there is a monthly tracking mechanism with semi-annual or annual true-up adjustments. In setting this period, one factor that needs to be considered is whether a hearing is required every time bills go up to recover lost sales. It is impractical and undesirable to have a new hearing every month, no matter how limited the hearing may be. If hearings are required, therefore, the Commission may not want to have adjustments made any more frequently than it currently does for fuel rules adjustments. The need for a hearing is discussed in Question #21. If the decision on Question #21 implements a process similar to the current fuel rules for making adjustments, it may dictate the answer to this issue.

Commission alternatives for determining the frequency of decoupling adjustments are:

Alternative One: Decoupling adjustments should be made monthly.

Alternative Two: Decoupling adjustments should be made quarterly.

Alternative Three: Decoupling adjustments should be made semi-annually.

Alternative Four: Decoupling adjustments should be made annually.

Alternative Five: Decoupling adjustments should be made consistent with the Commission's decision on Question #21.

23. At least in the beginning, should an initial decoupling program be done as a pilot program? For what time period?

In other states decoupling plans have normally been initially implemented as pilot programs. Approving a decoupling plan on an experimental or pilot program basis for a limited period of time will allow the Commission to monitor experience under the plan, including its impact on the company's earnings, on energy efficiency efforts, and on traditional ratemaking theory, before the decoupling plan is approved as a permanent part of the utility's rate structure.

Normally, pilot programs in other states have been approved for periods of three or four years. This time period allows a state commission sufficient time to adequately evaluate the impact of the decoupling plan.

Commission alternatives for deciding whether an initial decoupling plan should be approved as a pilot program and for what period are:

Alternative One: Approve an initial decoupling plan as a pilot program for a period of three to four years.

Alternative Two: Approve an initial decoupling plan as a pilot program for a period other than three to four years.

Alternative Three: Approve any decoupling plan, whether initial or not, in the rate case of a utility that is interested in decoupling.

24. How often should an approved decoupling plan be reviewed?

For any decoupling plan approved as a pilot program for a period of three or four years or more, the Commission may consider having the plan reviewed by Commission staff after 12 months of operation. Commission staff could conduct a limited review of performance, to determine if the mechanism is generally meeting expectations. If evidence indicates that there is

a significant difference between expectations and results, Commission staff may recommend that the Commission terminate or modify the pilot.

For any decoupling plan approved as a pilot program for at least two years, the Commission may consider having the plan reviewed by Commission staff approximately six to twelve months before the end of the pilot period. For any decoupling plan not approved as a pilot program, the Commission may consider having the plan reviewed by Commission staff as part of every rate case. In both of these cases, a more comprehensive review of the plan could be conducted to determine if the program should be continued with or without modification after the pilot period ends. Parties and interested persons should be allowed the opportunity to make recommendations as to the scope of the review, the means by which it is carried out, and whether the program should be continued with or without modification after the pilot period ends.

Commission alternatives for determining how often an approved decoupling plan should be reviewed are:

Alternative One: Approved decoupling plans should be reviewed as discussed above.

Alternative Two: Approved decoupling plans should be reviewed on an as-needed basis as determined in the utility's rate case when the decoupling plan is approved.

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Attachments

Investigation on the Commission's Own Motion Regarding
Innovative Utility Ratemaking Approaches that Promote Conservation
and Efficiency Programs by Removing Disincentives that Exist
Under Current Ratemaking Policies

05-UI-114

Survey Questions

It has often been suggested that there is a disincentive for gas and electric utilities to aggressively pursue cost effective gas and electric energy efficiency programs because doing so results in an adverse impact to shareholders due to lost revenues. Eliminating this disincentive could make the utility indifferent as to whether it implements such energy efficiency programs or constructs new utility facilities. Decoupling, one such tool to accomplish this, would make the utility whole for lost revenues resulting from these programs. Another tool, and one that could be used in tandem with decoupling, is providing some type of a performance incentive. The objective of this docket is to explore ways to maximize investment in cost effective energy efficiency at a reasonable cost to ratepayers without harming utility shareholders. To assist the Commission in this effort, please respond to the following questions.

1. Do the current rate structures of the electric and gas utilities in Wisconsin contain a net lost revenue and profit effect that is significant enough to discourage these utilities from developing and spending additional[1] money on energy efficiency programs?

2. (Question for utilities) Is your utility likely to propose energy efficiency spending above current levels if any disincentive to do so is removed?

3. If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency is it best for (a) the utility to develop and implement the programs; (b) should that be done by Focus on Energy; (c) should it be done through a combination of the utility and Focus on Energy; or (d) should it be done by some other entity?

4. Do utilities currently have the resources to develop and implement additional energy efficiency programs?

5. Should a decoupling mechanism consider only the effects of additional energy efficiency spending or should it also include the effects of other factors such as the economy and weather on actual vs. forecasted sales? If yes, please explain why.

6. If you answered yes to Question #5, should it be necessary for a utility to propose additional energy efficiency spending before it could seek recovery of any lost revenues due to other factors?

[1] The word "additional" is meant to refer to energy efficiency expenditures that are not otherwise required by law or by Commission order.

7. If a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, should it still recover lost revenues?
8. Please provide what you believe to be the key components of a decoupling mechanism.
9. Please provide examples of ratemaking mechanisms other than decoupling that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.
10. Should all customer classes be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending? Why or why not?
11. If your answer to Question #9 is no, should additional energy efficiency programs only be designed to benefit only participating customer classes? Why or why not?
12. Do you foresee controversy in determining the amount of reduced kWh sales caused by additional energy efficiency spending and the dollar margin on the reduced sales used to determine the under recovered amount to be included in rates? Why or why not?
13. Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small).
14. Is revenue decoupling illegal retroactive ratemaking? Why or why not?
15. Are you aware of mechanisms other states use to incent additional energy efficiency on behalf of their utilities that you believe would be successful in Wisconsin? If so, please identify those states?
16. Does a decoupling mechanism represent a reduction in risk to the utility? If so, should that be reflected in the authorized return on equity?
17. What process should the Commission use to establish the parameters of ratemaking approaches that promote energy efficiency; i.e., should the Commission approve utility-specific plans or establish guidelines for implementation in rate cases?
18. Are there important differences between gas and electric utilities to be considered when designing an incentive mechanism?

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
1. Do the current rate structures of the electric and natural gas utilities in Wisconsin contain a net lost revenue and profit effect that is significant enough to discourage these utilities from developing and spending additional[1] money on energy efficiency programs?	Yes. Increased energy efficiency spending and outcomes without a corresponding mechanism to recoup lost revenue requirements could discourage incremental efficiency programming. Current rate structures may put customer and shareholder interests at odds.	Yes. Providing positive incentives to increase investment in energy efficiency is more effective than discouraging increasing sales. Providing incentives builds on the assumption that a utility will act in its own financial interest. For natural gas utilities, rate design that recovers all fixed distribution costs through fixed rates mitigates negative revenue impacts of energy efficiency programs that reduce sales.	There is no significant disincentive to current levels of energy efficiency, as losses are contained through biennial rate cases. However, the current rate structure depends on energy sales for recovery of both fixed and variable costs, so utilities may be discouraged from spending additional money on energy efficiency.
2. Is your utility likely to propose energy efficiency spending above current levels if any disincentive to do so is removed?	Yes.	No. Removing a disincentive is not adequate to encourage expanded energy efficiency spending, beyond what the company currently provides under its voluntary programs. A positive incentive would be necessary to offer expanded or new programs.	Other factors must be considered, including costs, benefits, and whether additional programs are needed in addition to those already available.

[1] In Question #1, the word "additional" is meant to refer to energy efficiency expenditures that are not otherwise required by law or by Commission order.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
3. If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency is it best for (a) the utility to develop and implement the programs; (b) should that be done by Focus on Energy; (c) should it be done through a combination of the utility and Focus on Energy; or (d) should it be done by some other entity?	The utility should decide what is most appropriate.	There is no one answer. Current company programs focus on market areas not targeted by the statewide programs to avoid redundancy.	There is no easy answer. The company is comfortable with Focus on Energy, but if expanded, there must be timely cost recovery, and a review of lost margins in the current rate structure.
4. Do utilities currently have the resources to develop and implement additional energy efficiency programs?	If current company programs expanded significantly, incremental resources are required. If programs expanded to residential customers, additional resources are needed.	If additional programs were developed and implemented, the company would need to reevaluate the resources required.	Additional staff are required if the company's energy efficiency efforts in Wisconsin expand. Local support in customer interface and sales would need to be redeveloped and trained.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
5. Should a decoupling mechanism consider only the effects of additional energy efficiency spending or should it also include the effects of other factors such as the economy and weather on actual vs. forecasted sales? If yes, please explain why.	No, only energy efficiency effects should be considered.	No, only energy efficiency effects should be considered.	A narrow or broad approach could be used. A narrow approach focusing only on energy efficiency may be difficult to measure. A broader approach may be easier to measure, but controversial.
6. If you answered yes to Question #5, should it be necessary for a utility to propose additional energy efficiency spending before it could seek recovery of any lost revenues due to other factors?	NA	NA	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
7. If a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, should it still recover lost revenues?	Yes, lost revenues due to energy efficiency programs should still be recovered.	Yes, to the extent that efficiency spending reduced consumption or caused lost revenues, the utility should be made whole by the mechanism employed. If the utility is not allowed to recover this amount, an additional disincentive to promoting programs is introduced.	Yes, if the mechanism only considers the effects of energy efficiency, then other factors should not be considered.
8. Please provide what you believe to be the key components of a decoupling mechanism.	Fairness – a utility is given the opportunity to earn its authorized rate of return while achieving efficiency goals for customers. Transparency – the mechanism should be easily understood by customer and verifiable by the company and the PSC.	There is no one decoupling mechanism that fits all utility situations. Only the effects of additional energy efficiency spending should be considered. A mechanism similar to the one proposed in Question 13 is an acceptable approach.	The most easily administered decoupling mechanism should be relatively simple and easily understood by both customers and the Commission.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
9. Please provide examples of ratemaking mechanisms other than decoupling that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.	The company's Shared Savings Program is an example. Also, performance incentives could be provided if the utility meets goals.	For electric utilities, allowing a return for investment in efficiency programs as a form of alternative generation would attract capital to support such initiatives. For natural gas utilities, prices that recover fixed costs in fixed rates and variable costs in rates applied to the quantities consumed will mitigate disincentives and provide the customer incentive to reduce consumption levels.	Recovery of lost margins can be provided through mechanisms other than decoupling. These mechanisms existed in the 1990s, and could be re-designed to meet today's needs. Other options include performance incentives, shared savings, or an increased rate of return on energy efficiency investments. Straight fixed variable rate design or moving towards fixed charges for distribution service would remove a disincentive.
10. Should all customer classes be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending? Why or why not?	Yes, decoupling should be applicable to all customer classes. Different mechanisms may need to be targeted toward different customer classes.	No. To the extent that a benefit to a customer or class of customers cannot be identified, they should not be required to participate.	If the mechanism is narrowly focused on energy efficiency, then all classes could be included. However, large customers have more incentive to pursue energy efficiency. If the mechanism is broadly focused, it should be limited to residential and small commercial classes. Large customers have use changes not related to weather or energy efficiency.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
11. If your answer to Question #9 is no, should additional energy efficiency programs only be designed to benefit only participating customer classes? Why or why not?	Energy efficiency programs benefit all customers regardless of whether they participate in programs or not. There should be a balanced approach allowing for the socialization and direct assignment of program costs, as there are system and customer benefits.	No. Programs should not be bound by customer rate classes or other utility groupings.	Not necessarily. Each energy efficiency program should be evaluated on its own merit.
12. Do you foresee controversy in determining the amount of reduced kWh sales caused by additional energy efficiency spending and the dollar margin on the reduced sales used to determine the under recovered amount to be included in rates? Why or why not?	Yes, verification of savings will be difficult.	Yes. So long as rates are based on sales, especially forecasted sales, one can expect controversy in determining appropriate values.	Yes, determining reduced sales as a result of energy efficiency could be a contested issue in a rate case proceeding.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
13. Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small).	The alternative could help reduce the need for decoupling adjustments, but simply adjusting the sales forecast without a subsequent review of actual energy efficiency achieved does not fully address the risks to the utility and may act as an artificial ceiling on efficiency efforts.	This may be worthy of further review, given the company's preferences for alternatives to uniformly applied decoupling mechanisms.	This method could be useful in removing a disincentive to utilities that promote energy efficiency.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
14. Is revenue decoupling illegal retroactive ratemaking? Why or why not?	No. A decoupling mechanism can be included in setting prospective rates in a variety of ways.	No. Revenue decoupling does not change the rate base or change the rate of return set in a rate case. It works on a forward-looking basis to align revenues collected with actual sales.	This will depend on the decoupling method proposed. A formulaic approach to decoupling is not retroactive ratemaking. However, coupling a formulaic approach with an after-the-fact ROE test could, arguably, be considered retroactive ratemaking.
15. Are you aware of mechanisms other states use to incent additional energy efficiency on behalf of their utilities that you believe would be successful in Wisconsin? If so, please identify those states?	Financial incentives for successful energy efficiency programs are employed by CA, IN, MN, GA, NH, and OH. Nevada allows ROE premiums for efficiency investments.	California offers an incentive if utilities hit a certain performance level; Colorado permits a higher rate of return; and Duke Energy proposes allowing the company to earn 90 percent of what it would have earned if it built a generating plant instead.	The ACEEE report, "*Aligning Utility Interests with Energy Efficiency Objectives: A Review of Recent Efforts at Decoupling and Performance Initiatives Report*," lists several states.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
16. Does a decoupling mechanism represent a reduction in risk to the utility? If so, should that be reflected in the authorized return on equity?	Depends on the design. Mechanisms focused on eliminating disincentives associated with increased programs do not eliminate all business risk. Utilities still face volatility with a changing customer base, weather, and economic impacts. Decoupling that addresses energy efficiency should not alter authorized rates of return. This may discourage energy efficiency efforts.	No. According to financial theory, ROE only measures non-diversifiable risk, or macroeconomic factors. A decoupling mechanism is business-specific. A decoupling mechanism should not factor into the estimation of ROE.	A narrow mechanism focused on energy efficiency would have insignificant effect on risk. A broader mechanism provides protection against declining sales, but also eliminates the upside from greater than expected sales. It would be difficult to convince shareholders to accept a lower ROE, when they are giving up the upside potential in sales.
17. What process should the Commission use to establish the parameters of ratemaking approaches that promote energy efficiency; i.e., should the Commission approve utility-specific plans or establish guidelines for implementation in rate cases?	The company supports the general policy guidelines that permit a variety of approaches. Specific utility plans should be approved in a rate case.	Utility-specific plans are most appropriate. Each utility has unique markets and customer needs.	Specific guidelines created through a technical conference might be useful, but the ultimate decision should be left to the general rate cases.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Power & Light Co.**	**Wisconsin Electric Power Co.**	**Northern States Power Co.**
18. Are there important differences between natural gas and electric utilities to be considered when designing an incentive mechanism?	Yes. Differences include: (1) Natural gas use continues to decline on a per customer basis. This is not the case with electricity use. (2) Commodity costs for natural gas represent the largest portion of customer bills, providing a strong conservation incentive. (3) Natural gas commodity costs are recovered one-for-one through a balancing account mechanism. Decoupling on the electric side is likely to be much more complicated.	Yes. Differences include: (1) The timing of price changes and magnitude of price changes may impact customer elasticity differently for each market. (2) Customer service offerings, e.g. bundled electric vs. unbundled natural gas service. (3) The definition of customer class is not uniform between the markets. (4) Some natural gas customers have multiple fuel options, and on short notice can choose to switch. (5) Electric and natural gas customers have different seasonal load factors.	Yes. The primary difference is the impact that the weather has on natural gas sales compared to electric sales. Natural gas utilities are also facing reductions in demand.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
1. Do the current rate structures of the electric and natural gas utilities in Wisconsin contain a net lost revenue and profit effect that is significant enough to discourage these utilities from developing and spending additional money on energy efficiency programs?	Current ratemaking policies do not recognize energy use changes today due to climate change and carbon footprint concerns. They also do not provide the correct price signals to encourage customers to adopt energy efficient technologies and practices. Energy policy to spend additional dollars rests with the government, not utilities.	No. The regulatory model in Wisconsin eliminates most of the potential financial effects and disincentives. Additional improvements would further mitigate any perceived disincentive.	Yes, current ratemaking creates a disincentive for investor-owned utilities to engage in energy efficiency programs. As not-for-profit entities, municipal utilities have a strong incentive to encourage customers to use energy efficiency as a means to lower bills.
2. Is your utility likely to propose energy efficiency spending above current levels if any disincentive to do so is removed?	Innovative ratemaking approaches may remove a disincentive, but do not create an incentive to propose more energy efficiency spending.	Depends on the disincentive eliminated. If energy efficiency expenditures are included in rates, a strong disincentive is removed. If the assumed disincentive is reduced sales volume resulting from energy efficiency, this is not the most important factor discouraging utilities from spending additional money. More significant factors include customer attitudes, market forces, rate and customer impacts, and regulatory treatment of the spending.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
3. If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency is it best for (a) the utility to develop and implement the programs; (b) should that be done by Focus on Energy; (c) should it be done through a combination of the utility and Focus on Energy; or (d) should it be done by some other entity?	Utility provided programs introduce duplication, conflict, and confusion with existing Focus on Energy programs.	Which entity develops and implements the program will depend on the program's specifics. The Commission should be open to a combination of Focus on Energy and utility programs.	Most municipal utilities deliver energy efficiency through their Commitment to Community programs. Many municipals also pay into the Focus on Energy programs. While each of these efforts will need to increase, WPPI does not see any benefit in creating new organizations to deliver programs.
4. Do utilities currently have the resources to develop and implement additional energy efficiency programs?	Varies from utility to utility. Using the Focus on Energy program is the best approach to providing uniform and consistent energy efficiency programs across the state.	No. Significant lead time would be needed.	NA
5. Should a decoupling mechanism consider only the effects of additional energy efficiency spending or should it also include the effects of other factors such as the economy and weather on actual vs. forecasted sales? If yes, please explain why.	No, mechanisms that consider only the effects of additional energy efficiency spending are not true decoupling mechanisms and do not recognize larger societal changes due to climate change and carbon footprint concerns.	No, only energy efficiency effects should be considered.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
6. If you answered yes to Question #5, should it be necessary for a utility to propose additional energy efficiency spending before it could seek recovery of any lost revenues due to other factors?	No. Two separate issues are being addressed. Full revenue decoupling is a ratemaking policy to recognize changes in energy use and how they affect a utility. Expanded energy efficiency is an energy policy.	NA	NA
7. If a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, should it still recover lost revenues?	Not allowing a lost revenue recovery mechanism if the utility is earning its ROE seems to be a disincentive to use the mechanism at all.	Yes. Only lost revenues resulting from a drop in sales due to energy efficiency programs (either utility or Focus on Energy programs) should be considered. Utility earned or authorized ROE should not be a factor in a decoupling mechanism.	NA
8. Please provide what you believe to be the key components of a decoupling mechanism.	A full revenue decoupling mechanism is simple and transparent, and allows for symmetrical treatment of variances. Frequent adjustments are preferable to annual adjustments.	A decoupling mechanism: (1) should be transparent so all parties understand calculations; (2) limited to adjustments for energy efficiency improvements; (3) applies to all customer classes; (4) does not include an earnings test; and (5) is easy to administer.	The Commission should ensure that delineation between retail and wholesale jurisdictions is not blurred, and therefore should allocate costs associated with retail decoupling only to the retail jurisdiction.

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
9. Please provide examples of ratemaking mechanisms other than decoupling that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.	Duke Energy's "Save-a-Watt" allows Duke to receive a return on energy efficiency projects that is equal the return on supply side generation.	Straight fixed/variable rate design would eliminate the disincentive for which decoupling is being considered.	The Commission should permit municipal utilities to engage in deferral accounting of conservation and energy budgets so that utilities have an opportunity in the next rate case to recover incurred expenditures in excess of amounts included in approved rates. The Commission should also permit municipals to establish a capital budget approved in a rate case and earn a return on the utility capital invested directly in energy efficiency projects at their own facilities or in customer facilities.
10. Should all customer classes be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending? Why or why not?	No, large industrial customers should not be included. These customers are already aggressively seeking out energy efficient technologies and processes.	Yes, all classes should be included because all classes can become more energy efficient. However, if limited to one class, recovery of lost revenue or return of revenue should be limited to the class subject to decoupling.	NA
11. If your answer to Question #9 is no, should additional energy efficiency programs only be designed to benefit only participating customer classes? Why or why not?	Yes. Cross subsidies between customer classes should be avoided.	NA	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
12. Do you foresee controversy in determining the amount of reduced kWh sales caused by additional energy efficiency spending and the dollar margin on the reduced sales used to determine the under recovered amount to be included in rates? Why or why not?	Yes. The effects of other factors, such as the economy, lifestyle changes, weather, naturally occurring conservation, free ridership and others will be difficult to separate out.	Yes, because it is difficult if not impossible to measure the effect of energy efficiency spending on sales.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
13. Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small).	No. For the reasons given in Question #12, energy efficiency adjustments to include during a rate case would be just as cumbersome before program implementation as they would afterwards. Also, one cannot assume that adjustments would be small.	This alternative could protect the utility from lost revenues resulting from new programs initiated between rate adjustment periods. So long as adjustments are limited to the specifics of the program, it may remove the disincentive for expanding energy efficiency programs.	NA
14. Is revenue decoupling illegal retroactive ratemaking? Why or why not?	No, decoupling is not retroactive ratemaking, provided a prospective formulaic approach is adopted.	Depends on the decoupling mechanism proposed.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
15. Are you aware of mechanisms other states use to incent additional energy efficiency on behalf of their utilities that you believe would be successful in Wisconsin? If so, please identify those states?	Various states have versions of full or partial decoupling. As mentioned in Question #9, Duke's "Save-a-Watt" program allows the utility to receive a return on energy efficiency projects equal to the return on supply-side generation.	No.	NA
16. Does a decoupling mechanism represent a reduction in risk to the utility? If so, should that be reflected in the authorized return on equity?	No, there is neither a reduction nor a shift in risk. A utility must still manage costs within a budget to achieve ROE targets, and must continue to serve customers regardless of unforeseen events, new laws or regulations.	No.	NA
17. What process should the Commission use to establish the parameters of ratemaking approaches that promote energy efficiency; i.e., should the Commission approve utility-specific plans or establish guidelines for implementation in rate cases?	Since there is no agreement between utilities, the Commission should allow each utility to pursue a course of action that is best for its business case. First, the Commission must recognize that decoupling and an increase in energy efficiency spending are two separate issues.	General statewide guidelines could be established, but implementation should be specific to the utility.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Wisconsin Public Service Corp.**	**Madison Gas and Electric Co.**	**Wisconsin Public Power Inc.**
18. Are there important differences between natural gas and electric utilities to be considered when designing an incentive mechanism?	No, the underlying theory for decoupling is applicable and appropriate for both electric and natural gas.	Yes. Natural gas sales are affected more by weather. Additionally, about 70 percent of natural gas utility revenues are already subject to a decoupling-type mechanism. The purchased gas adjustment clause and true-up provisions address sales variances.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
1. Do the current rate structures of the electric and natural gas utilities in Wisconsin contain a net lost revenue and profit effect that is significant enough to discourage these utilities from developing and spending additional money on energy efficiency programs?	It is irrelevant whether utilities are discouraged from developing energy efficiency programs or investing additional money in them, because the statewide energy efficiency program is mandated. Utilities also obtain approved returns in rate cases that are higher than industry average.	Yes. Traditional ratemaking results in strong utility disincentives to pursuing aggressive policies and programs, as there are adverse financial impacts for shareholders. See additional comments in the attachment.	While lost revenues may be of concern, the potentially bigger financial issue is the impact of energy efficiency on the utility's rate base. Lost revenue adjustment mechanisms do not address this financial effect. See additional comments in the attachment.
2. Is your utility likely to propose energy efficiency spending above current levels if any disincentive to do so is removed?	NA	NA	NA
3. If disincentives are removed and the utility elects to spend higher than current amounts on energy efficiency is it best for (a) the utility to develop and implement the programs; (b) should that be done by Focus on Energy; (c) should it be done through a combination of the utility and Focus on Energy; or (d) should it be done by some other entity?	A utility's core business is to sell electricity and natural gas. Energy efficiency should be promoted through an entity other than the utility whose core business is energy efficiency, such as Focus on Energy. This will be more cost effective and reduce confusion in the market.	The issue of how to ensure the best energy efficiency programs should not be addressed in this docket. This issue involves a very different set of considerations.	Given the need to meet aggressive energy efficiency targets, as recommended by the Governor's Task Force on Global Warming, the Commission should be open to the possibility of including multiple entities to fill gaps in energy efficiency delivery, while avoiding unnecessary duplication of effort.

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
4. Do utilities currently have the resources to develop and implement additional energy efficiency programs?	NA. See Question #3.	While utilities and other jurisdictions may have the resources, or could develop the resources to implement effective energy efficiency programs, this question is not central to the issues raised in this docket.	NA
5. Should a decoupling mechanism consider only the effects of additional energy efficiency spending or should it also include the effects of other factors such as the economy and weather on actual vs. forecasted sales? If yes, please explain why.	The ICG strongly opposes revenue decoupling. To provide compensation for lost margin for factors unrelated to energy efficiency would be unjust and unreasonable.	A lost revenue recovery clause that removes financial risk to a utility only due to its own energy efficiency efforts does not offset the utility incentive to sell more than estimated test year sales, and is not a method supported by the JPI. A partial decoupling mechanism can be designed so that certain risks remain with the utility, such as weather, but that offsets the utility incentive to sell more.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
6. If you answered yes to Question #5, should it be necessary for a utility to propose additional energy efficiency spending before it could seek recovery of any lost revenues due to other factors?	NA	Yes, it should be necessary for a utility to commit to additional energy efficiency funding and support for additional energy efficiency efforts, such as improved building codes and appliance standards, in order to recover authorized fixed costs. It should also be preferred that utilities adopt improved rate designs and significant incentives for customer-sited renewable resources. Without such requirements, these mechanisms become little more than a risk reduction clause without significant public or consumer benefits.	NA
7. If a decoupling mechanism considers only the effects of additional energy efficiency spending, but due to weather, economic, or other factors the overall sales are equal to or greater than forecast, or if due to other factors the utility is either earning its authorized ROE or is within some range of its authorized return, should it still recover lost revenues?	Isolating the effects of energy efficiency spending may not even be viable, and utilities may try to game the system in order to prove correlation with additional energy efficiency spending.	Yes, the utility should still be allowed to recover lost revenues.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
8. Please provide what you believe to be the key components of a decoupling mechanism.	First, ICG does not believe that the perceived problems exist due to current practices. Instead of decoupling the Commission should: (a) continue to mandate Focus on Energy; (b) leverage the core competencies of Focus on Energy; (c) limit distortions and risk through biennial rate cases with a reopener and fuel case options; (d) utilize the Straight Fixed Variable Method; and (e) sell saved MWhs in the MISO market to further eliminate risk due to lower retail consumption.	JPI favors a "revenue per customer" decoupling mechanism, a fixed cost true-up approach, which allows the utility to recover authorized gross margins. This mechanism: (1) effectively addresses the utility incentive to sell more than test year sales; (2) mitigates the risk to utility financial interests from all sources of public policy or private actions to reduce energy use; (3) is easy to administer and prevents gaming; and (4) is flexible enough to accommodate special circumstances.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
9. Please provide examples of ratemaking mechanisms other than decoupling that could incent utilities to pursue additional energy efficiency spending at a reasonable cost to ratepayers.	See Question #8.	WP&L's Shared Savings program is an example that allows the utility to earn on increased energy efficiency efforts.	ECW is completing a study on utility incentives, due in September. The California Public Utilities Commission has incentives for investor owned utilities; however, they do not produce windfalls to utility investors. Additionally, while this mechanism can provide positive earnings adjustments if certain goals are met, there may also be earnings reductions if a utility fails to meet certain goal levels. Under Duke Energy's Save-a-Watt program, the utility receives a payment equal to the percentage of supply-side costs they avoid by promoting energy efficiency. There is concern from consumer groups because Duke is allowed to recover 90 percent of avoided costs.
10. Should all customer classes be included in any mechanism that is implemented to encourage utilities to promote additional energy efficiency spending? Why or why not?	No. Decoupling and utility incentives are not practical for large customers. Revenue per customer decoupling assumes an average customer usage/ revenue. Energy use from one industry to another is very different.	Not necessarily, as customer classes present different sets of circumstances and often require different program designs.	Question #10 is addressed with Question #11 below.

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
11. If your answer to Question #9 is no, should additional energy efficiency programs only be designed to benefit only participating customer classes? Why or why not?	No, additional energy efficiency programs should not benefit only customer classes participating in a decoupling mechanism. This would be unreasonable and ineffective, as industrial customers that implement energy efficiency projects provide system-wide benefits and cost effective energy savings.	No. All customers should be provided effective savings opportunities. Allocating program costs to the specific customer class eligible to participate in the program is appropriate and equitable.	Across-the-board responsibility for lost revenues implies that there are opportunities for everyone to become more efficient. Excluding certain customers implies that those customers are as efficient as they can be. It may be unfair to offer programs to only some customers, while allocating lost revenue responsibility to all. An intermediate course may be to have separate mechanisms for each rate class.
12. Do you foresee controversy in determining the amount of reduced kWh sales caused by additional energy efficiency spending and the dollar margin on the reduced sales used to determine the under recovered amount to be included in rates? Why or why not?	Yes, isolating the effects of additional energy efficiency spending would be very complex, resulting in questionable accuracy, high administrative burdens, and unmanageable programs.	The greatest possibility for controversy exists when determining the amount of adjustment to make for a lost revenue recovery mechanism, which only considers energy efficiency effects on sales. If a "revenue per customer" approach is adopted, this adjustment calculation is typically more straightforward.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
13. Considering the lag time between the design and implementation of energy efficiency programs and that utilities file regularly for rate reviews, would the following alternative to decoupling be useful in removing disincentives to utilities promoting these programs? For programs that a utility is proposing prior to a rate case filing an estimate of reduced sales would be made and the test year sales forecast would be reduced accordingly. For programs developed and implemented during the utility's biennial period, a decoupling mechanism could be used to adjust for the impact of these programs until the next rate period (it would be likely that the lag time in implementing programs would make revenue adjustments relatively small).	In Wisconsin, there is little room for distortions because of frequent rate case applications. Therefore, no adjustments are needed.	A test year forecasting approach as described in the question should be done if a decoupling mechanism is adopted or not. But by itself it may not be adequate depending on the potential magnitude of increased energy efficiency or other efforts that may result in decreased actual sales. Since fixed costs, including rate of return, are collected on the margin, their recovery is sensitive to the degree that actual sales and revenues decrease.	NA

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
14. Is revenue decoupling illegal retroactive ratemaking? Why or why not?	ICG does not believe that decoupling constitutes retroactive ratemaking. Rates are set in advance, subject to true-up.	To the extent that the Commission concludes that decoupling may involve aspects of retroactive ratemaking, the JPI submit that decoupling does not constitute illegal retroactive ratemaking under Wisconsin law.	NA
15. Are you aware of mechanisms other states use to incent additional energy efficiency on behalf of their utilities that you believe would be successful in Wisconsin? If so, please identify those states?	Continued use of an independent entity whose sole mission is to promote energy efficiency would be successful in promoting greater energy efficiency in Wisconsin especially since the framework already exists.	A good source document is *"Aligning Utility Incentives with Investment in Energy Efficiency,"* November 2007, by Val Jensen of ICF International.	See Question #9.

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
16. Does a decoupling mechanism represent a reduction in risk to the utility? If so, should that be reflected in the authorized return on equity?	Yes. Reduction in risk must be reflected in authorized returns on equity, although this is difficult if not impossible to achieve.	Financial risk may increase if a utility implements new programs, promotes new building and appliance codes, or other efforts. If full decoupling is applied, financial risk due to new initiatives and other factors is mitigated. The issue is what is the net effect of the increased risk due to new initiatives and the decreased risk due to decoupling. This is then compared to the utility's authorized rate of return. An adjustment to ROE is not the only way to reflect any net change in risk from decoupling. Decoupling may benefit bondholders more than shareholders by decreasing volatility of revenues. This financial benefit is passed onto customers.	Decoupling mechanisms do not reduce risk; they shift it from the utility to the ratepayers. Financial research suggests that for required return on stocks, only macroeconomic risks matter. Other risks, like energy efficiency programs or the weather affect cash flow forecasts but not required returns. These risks can be diversified away, but macroeconomic risks cannot. If a decoupling mechanism is broad-based, then the utility's exposure to macroeconomic conditions has been reduced, and risk to its shareholders reduced. Therefore, the only adjustment to ROE due to decoupling should be for the protection it offers from macroeconomic risks. However, whether the Commission decides to adjust a utility's ROE is a policy call. Bondholders are affected by all risk that a utility faces. With decoupling, cost of debt may decrease significantly. Since the market sets bond returns, nothing is needed to implement bondholder impact.

Survey Summary Table Docket 5-UI-114			
Question No.	**Industrial Customer Groups**	**Joint Public Interveners**	**Energy Center of Wisconsin**
17. What process should the Commission use to establish the parameters of ratemaking approaches that promote energy efficiency; i.e., should the Commission approve utility-specific plans or establish guidelines for implementation in rate cases?	Utility-specific plans should be used, as each utility has different methods for cost allocation and varying inter- and intra-class rate designs.	It would be useful if the Commission outlined the scope of potential mechanisms it might entertain. JPI recommends that utility-specific mechanisms be adopted only in rate cases, so special circumstances can be considered.	NA
18. Are there important differences between natural gas and electric utilities to be considered when designing an incentive mechanism?	The natural gas industry has experimented with and adopted more incentive mechanisms. This may be due to the fact that natural gas utilities have volumetric rates, and face a larger risk of lost revenues.	Yes and no. Natural gas utilities have a higher proportion of fixed costs in rates, and some customer classes may have a declining use per customer. But the general framework of issues would be fairly common across utilities.	Yes. Decoupling is applied more often to natural gas utilities, and less often to electric utilities. The electric utility industry is capital intensive, and there is a noticeable upward trend in demand. Natural gas consumption today is about at the level it was in the early 1970s. Natural gas rates are heavily influenced by variable costs, rather than fixed costs. As a result, the financial consequences of deferring a plant investment for a natural gas utility are not as great as it is for an electric utility.

Additional Comments Outside of Survey Questions

Joint Public Interveners (JPI)

Introductory Comments

- JPI responses to the survey question were made in the context of the Global Warming Task Force's recommendations to facilitate increased efforts for energy efficiency, innovative rate designs, and customer-sited renewable resources. Emphasis was placed on the implementation of policies and actions to reduce future GHG emissions, and to mitigate the impacts on utility customers and society as a result of accelerating energy prices and costly infrastructure needs.
- Global Warming Task Force recommendations include both increased public and non-utility initiatives, such as improved building codes and appliance standards, as well as expanded utility efforts. Both will have consequences for utility financial interests.
- There is a tendency in the questions to only focus on the direct impacts of energy efficiency programs developed and administered by a utility. This artificially limits the identification of disincentives to the pursuit of or support for policies by a utility.
- The key to success will be to develop appropriate mechanisms that are designed and delivered well enough to allow sufficiently large customer benefits so sharing a portion of those benefits to reduce utility risk still leaves all parties better off than if less investment were made due to misaligned incentives.

Additional comments for Question 1

- JPI describes two primary barriers to a utility aggressively pursuing energy efficiency:
    1. <u>The "throughput incentive"</u> (a disincentive):

       This describes the strong incentive that traditional ratemaking creates for a utility to sell more than the estimated test year sales used to establish the utility's rates, allowing the utility to over-earn its authorized return because it will collect more fixed costs than estimated. This discourages the utility from voluntarily undertaking activities that will result in increased risk of financial loss for its shareholders.
    2. <u>Inability to earn on something other than capital</u> (absence of an incentive):

Increased activities such as energy efficiency programs can displace or defer capital investment, the only thing for which utilities are traditionally allowed to earn a return. In contrast, energy efficiency costs are typically treated as expenses.

- JPI lists other factors that influence a utility's view of energy efficiency:
    1. Energy efficiency may not be reliable or persistent enough to meet energy needs;
    2. Contributions to overall rate impacts may affect sales, which may affect customer retention or ability to attract new customers;
    3. Potential principal-agent problem if utility management is highly rewarded for short-term earnings increases;
    4. Concerns that in a more competitive utility industry, key factors to success will be actual physical assets owned and overall financial size and strength, not necessarily lower sales or fewer plants.

- Considerations when assessing the extent of disincentives to Wisconsin utilities:
    1. The level of energy efficiency and other activity
        - While JPI considers current efforts modest, any significant increases will further exacerbate utility disincentives.
    2. The use of a third party administrator for statewide energy efficiency efforts
        - This likely amplifies the risk of decreased sales to a utility, because impacts on a specific utility are hard to trace.
    3. The lag time between when rates are set and then reset.
        - Use of a biennial test year mitigates the potential lag time between when rates are initially set and trued-up. However, this will not offset the magnitude of lost revenues from efforts recommended by the Global Warming Task Force.

Industrial Customers Groups (ICG)

Introductory Comments

- ICG believes the premise that incentives are necessary to encourage utilities to broaden energy efficiency efforts is faulty for the following reasons:
    1. There is no problem with Wisconsin's current energy efficiency programs, due in part to 2005 Act 141; and
    2. If the Commission wishes to encourage more energy efficiency, it can do so within the current statutory and regulatory framework.
- Utilities do not need incentives to promote, offer, or maintain successful energy efficiency programs, because they are already required by law to do so.
- Utility profit maximizing behavior is primarily driven by signals from financial institutions. Because of this, either performance incentives will not work, or they will not be required because Wall Street expects utilities to promote energy efficiency anyway.
- Decoupling sales from revenue as a tool to make utilities indifferent to energy efficiency unjustly transfers risk from the utility to customers, without a corresponding shift in benefits. Decoupling increases rate volatility and uncertainty, undermines customer efficiency efforts, muddles price signals to consumers, and potentially distracts utilities from effectively implementing their core business.

Energy Center of Wisconsin (ECW)

Response to Question 1

- ECW describes two key financial effects as a result of increased energy efficiency programs, holding all else equal:
    1. Lost revenue problem: programs reduce the earned return to a level that is lower than it would be absent the programs. This is what most people discuss.
    2. Lost assets problem: over the long-run, energy efficiency programs slow the rate of growth in the rate base. The rate base is the ultimate source of cash flow generation for the utility. ECW believes that this is the larger problem.
- If lost revenues were a significant problem in all cases, then all of the major utilities would likely be requesting such treatment.
- In the aggregate, utility returns are a function of the size of the rate base. Overtime, the aggregate returns for a utility that promotes energy efficiency will be persistently less than if they had not implemented such programs. See Figures 1 and 2 in ECW's comments.

- If a lost revenue mechanism is implemented, it will only address the short-run, between-the-rate-case problem.
- The lost assets problem may be improved if either of the following two actions occur:
    1. The Commission allows utilities to earn returns when they make demand-side expenditures, rather than expensing them. This would reduce the lost assets problem to some extent.
    2. Financial market conditions change in ways that make adding supply-side assets more difficult, and energy efficiency programs necessities.

Elements to be Included in a Proposal[1]

In addition to all supporting testimony and data customarily filed in a base rate proceeding, the Commission may want to consider requiring the utility to file the following information necessary to support the implementation of its proposed decoupling mechanism:

1. Objectives

The proposal should begin with a set of clearly defined goals for the decoupling regime. What are the reasons for it, and why is it likely that the proposal will achieve these ends more efficiently than other forms of regulation? Among such objectives are:

- Risk reduction – and corresponding cost reductions – for consumers and shareholders;
- Increased investment in least-cost resources, in particular energy efficiency, thereby reducing the long-term costs of serving load;
- Increased efficiency in utility operations and management; and
- Objective analysis of other cost-effective energy-saving opportunities, including fuel-substitution, for consumers.

2. Description of the Decoupling Method

The mechanics of the decoupling proposal must be explained in detail. This could be done by the filing of a tariff describing at least the following:

- *The mathematics of the mechanism*. How are revenues decoupled from sales, e.g., by revenue per customer, as a pre-determined annual revenue requirement (i.e., future test year), or in some other fashion? Is it full, partial, or limited decoupling?
- *Decoupling adjustments*. How will actual revenues be reconciled with allowed revenues? How often will the decoupling adjustments be made? Monthly (i.e. on a billing cycle basis), quarterly, semi-annually, annually? Will they be applied on a customer-class basis or equally across all customer classes? Is a hearing required every time an increase occurs? Why or why not?
- *Timing:* Will the decoupling adjustments be implemented in the month in which sales volumes deviate from test year volumes, or will differences accrue and be deferred for later collection/rebate?
- *Term*. When will the decoupling program end? Are there provisions for renewal, including a full investigation of the underlying cost of service? Under what conditions, if any, can the decoupling program be prematurely terminated, and what actions (including a general rate case) can, or should, then be taken? Are the answers to these questions different if the initial decoupling proposal is for a "pilot program"?
- *Implementation*. When and how will the decoupling mechanism be implemented. For example, should implementation occur only in a rate case, or within a limited period of time after a rate case?

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[1] Shirley, Wayne, Lazar, Jim, and Weston, Frederick, The Regulatory Assistance Project (June 30,2008), *Revenue Decoupling: Standards and Criteria, A Report to the Minnesota Public Utilities Commission*.

3. Revenue Requirement

If the proposal calls for a multi-year decoupling proposal, the means by which the allowed revenue will be adjusted in each of the later years, if at all (as distinguished from the decoupling adjustments themselves, e.g., numbers of customers), should be detailed. Such adjustments could be made through regular proceedings ("attrition cases," as in California) or through a mathematical overlay that might account for productivity gains, inflation, and a limited set of factors (sometimes referred to as "exogenous") whose cost impacts are not immediately captured in the other measures.

4. Cost of Service

The decoupling proposal should be accompanied by a detailed class cost of service analysis. To the extent that the decoupling mechanism is limited to certain classes of customers, the cost of service analysis should show how cost-of-capital benefits are flowed through to the participating classes.

5. Energy Efficiency, Rate Design, and Other Public Policy Objectives

The decoupling proposal should explain how decoupling will advance the state's efficiency goals. Specifically, the proposal should include design details, including performance targets, incentives, and penalties, for programmatic efficiency efforts. Also to be considered are changes in retail rate designs that better relate the long-run costs of service to demand, thus better informing customers of the economic impacts of their consumption decisions. These could include, for natural gas service, reduced customer charges, adjustments to hook-up fees, and increased unit-based delivery and commodity charges. For electric service, more dynamic (time-sensitive) pricing structures, such as critical peak and even real-time pricing, and innovative tariffs for users with on-site generation, could be implemented. Oftentimes, the adoption of a new rate structure causes short-term revenue problems – over- or under-collections in particular rate classes. Decoupling relieves some of the pressure to assure revenue-neutrality for the class in question, when the new pricing goes into effect.

7. Existing Revenue Adjustments

A proposal should explain how current adjustments to collected revenues will be treated under the decoupling regime. Today there are a number of adjustments that are made to the rates by gas and electric utilities to assure the allowed amounts of money are collected to cover specified expenses. Purchased gas is one such expense, fuel and purchased power for electric generation are another. The general intent of these adjustments is, in effect, to decouple the revenues associated with the expense from sales levels, while leaving the utility's base revenue requirements at risk. Indeed, this is a kind of partial decoupling. It is likely that most, if not all, non-commodity adjustments can be eliminated under a decoupling program. This, of course, will depend upon the specifics of each adjustment (i.e., the manner in which it is made, the purpose it serves, the degree to which the utility can efficiently manage the cost under a revenue cap and whether the public good is advanced by its doing so, etc.), upon the nature of the decoupling regime (full, limited, or partial), and upon any law that governs them.

8. Reporting and Evaluation

A decoupling proposal should be accompanied by a plan for evaluating its effectiveness. A prerequisite to the plan will be a defined set of reporting requirements. What information should be made available that either is not currently being collected or is not managed in a fashion most useful to an assessment of ratemaking methods? Among the categories of data to be provided should be the following:

- *Revenue Comparisons.* How would revenues under traditional regulation have differed from those collected under the decoupling regime? What are the relatives effects of efficiency programs, actual weather (to the extent that there is not a weather adjustment under traditional regulation), and other factors on revenues.
- *Bill Comparisons.* A corollary to the question of revenues is that of customer bills. How have average bills differed from those under traditional regulation?
- *Energy Efficiency.* Is the company meeting its energy efficiency savings goals? Has energy efficiency achievement been enhanced under the decoupling mechanism?
- *Service Quality.* Has service quality declined?
- *Risk.* Has the decoupling regime stabilized revenues as expected and, if so, how has this affected the utility's overall risk profile?

9. Customer Information

The proposal should describe how customers will be informed of the decoupling program, how it works and what it means for them, and how the adjustments will be made on their bills.

Criteria by Which to Evaluate a Proposal[1]

1. *Objectives:* Are the objectives that have been set out for the decoupling program appropriate? Is the proposal likely to achieve them? Will it achieve the overarching goal of aligning the utility's financial incentives with the state's public policy objectives? Is it more likely to do so than the alternatives? Will the general good of the state be promoted by it?

2. *Revenue Requirement:* Will this form of regulation result in a lower long-run cost of service, and therefore a lower revenue requirement, than the alternatives?

3. *Just and reasonable rates:* Will the rates charged under the decoupling regime be just and reasonable?

4. *Quality of service:* Will service reliability and quality deteriorate, remain the same, or improve under the decoupling program?

5. *Efficiency:* Is the decoupling program accompanied by a meaningful increase in the utility's investment in energy efficiency resources, above and beyond that which is required by Minn. Stat. § 216B.240116 and Minn. Stat. § 216B.241, subd. 1c(17

6. *Other public policy goals:* Will decoupling inhibit or advance achievement of other public policy aims, such as infrastructure development and emissions reductions? How will the decoupling plan affect the utility's ability to achieve these objectives?

7. *Simplicity and ease of administration:* Will administration of decoupling be significantly more difficult than traditional regulation? How will it affect resource needs at the Commission and other state agencies? Will the program be easy to administer, both for the utility and the regulators?

8. *Transparency:* Will the mechanics of the decoupling be easily discerned? Will the calculations of the adjustments be easy to understand and follow?

9. *Comprehensibility:* Is the program easily understood? Can its features be easily communicated? Has the utility designed a satisfactory public information campaign to explain it to consumers?

10. *Consequences:* What is the likelihood of unwanted outcomes (e.g., significant over- or under-earnings)? Is it greater than under the alternatives?

11. *"Off-Ramps:"* Does the mechanism have a pre-determined set of conditions under which it would self-terminate or be subject to regulatory review if the impacts are significantly different from those anticipated at approval?

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[1] Shirley, Wayne, Lazar, Jim, and Weston, Frederick, The Regulatory Assistance Project (June 30,2008), *Revenue Decoupling: Standards and Criteria, A Report to the Minnesota Public Utilities Commission*.